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MEXICAN-AMERICAN STUDY PROJECT. ADVANCE REPORT 4, RESIDENTIAL SEGREGATION IN THE URBAN SOUTHWEST.

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THIS ADVANCE REPORT PRESENTS A STATISTICAL ANALYSIS OF THE DEGREE OF RESIDENTIAL SEGREGATION OF THE MEXICAN-AMERICAN AND NEGRO SUBPOPULATIONS FROM THE ANGLO SUBPOPULATIONS IN URBAN AREAS. ALL OF THE DATA WERE DRAWN FROM THE 1950 AND 1960 CENSUSES OF POPULATION AND HOUSING. FACTORS STUDIED INCLUDE URBANIZATION PATTERNS AND ORIGINS OF MEXICAN-AMERICAN GHETTOS, SEGREGATION PATTERNS, AND A STATISTICAL ANALYSIS OF URBAN DEMOGRAPHY. IT WAS CONCLUDED THAT THE DEGREE OF RESIDENTIAL SEGREGATION IS IN PART DUE TO RELATIVE ECONOMIC STATUS, AND THAT MEXICAN-AMERICANS ARE LESS SEGREGATED THAN NEGROES. A DETAILED DESCRIPTION OF EXPERIMENTAL VARIABLES IS INCLUDED. THIS REPORT IS ALSO AVAILABLE FROM THE DIVISION OF RESEARCH, GRADUATE SCHOOL OF BUSINESS ADMINISTRATION, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIFORNIA 90024, FOR $2.00. (JM)

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MEXICAN-AMERICAN STUDY PROJECT

Division of Research
Graduate School of Business Administration
University of California, Los Angeles

Advance Report 4

RESIDENTIAL SEGREGATION IN THE URBAN SOUTHWEST

A Comparative Study

by

Joan W. Moore and Frank G. Mittelbach
with the assistance of
Ronald McDaniel

Preliminary and Subject to Revision

Price: $2.00
June 1966

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FOREWORD

This series of Advance Reports is designed to open a window through which research work going forward at the Mexican-American Study Project can be seen and reviewed. The Project, begun in early 1964 with the support of a generous grant from the Ford Foundation, is scheduled for completion in late 1967. The final analysis will thus not be available for some time. Meanwhile, the Advance Reports serve the purpose of releasing some of our preliminary findings and evoking critical comment.

The publication of partial results, however, should not obscure the over-all objective of the Project. Broadly speaking, the study seeks to bring to the nation's attention the presence and the problems of the second largest disadvantaged minority in the United States. The need for doing so, already apparent when the Project was conceived, has become even more evident as we proceed. If there is one common theme to our numerous contacts with highly placed government officials, social scientists, influential opinion-molders, and the proverbial intelligent layman, it is the vast ignorance prevailing outside the Southwest about the Mexican-American population. And while people in the Southwest are more aware of this minority, false stereotypes and indifference to its problems are still widespread.

A comprehensive analysis of the social and economic position of the Mexican-American population, it is hoped, will ease the burden of ignorance and indifference, improve understanding between the minority and the larger society, and contribute the basic knowledge required for more effective remedial action. Of course, such an analysis perforce includes American society at large, which interacts with the minority and thus determines in substantial measure its place in our national life. In this sense, the Project offers a study of the dominant system as well as the Mexican-American minority.

In a country known as a "nation of nations," the study of minority populations and their relation to society has long since been a concern of the social sciences. The present research project is in this tradition. We believe that it is timely if not overdue. The study was begun at a time when the American public had become more conscious of the persistence in our midst of poverty, deprivation, and their manifold determinants, and when concerted efforts were made to grapple with these problems. In such a context it is singularly appropriate to deepen our knowledge of a population group characterized by widespread disadvantage on nearly every yardstick at hand—educational attainment, occupational structure, income and wealth, housing, effective community organization and political strength, to name only a few.

The study of any minority population raises a host of questions concerning its identification, especially when its members show substantial or increasing socio-economic and cultural differences. In the case of Mexican-Americans, these problems are compounded by semantics. Every study of Mexican-Americans in the United States — in fact, practically every conversation about or within the group — begins inevitably with questions of definition. These matters will be examined more fully in the final product of this study. It suffices to say here that "Mexican-American" is used as a generic term to include people of Mexican, Spanish, or mixed Indian descents, although members of the group in various parts of the Southwest prefer to be known as Spanish-Americans or Latin-Americans or Mexicanos or by other names. The only further comment warranted at this point is a note of regret. We have been unable so far to devise a short, descriptive, and immediately intelligible term that avoids the hyphenation. Needless to say, the use of "Mexican-American" does not imply any subordinate class of citizenship or residency.

For the purpose of this study, the Southwest is defined to include five states: Arizona, California, Colorado, New Mexico, and Texas. It is in these states that the vast majority of Mexican-Americans in the United States, now estimated at a minimum of 4 million, is located. The study focuses on urban areas in the Southwest. The problems of rural Mexican-Americans, especially of migrant workers, have been rather fully investigated. Yet, the Mexican-American population has come to be highly urbanized, and the gaps in knowledge are most notorious in the urban segment. At the same time, the dividing line between urban and rural cannot be drawn sharply. For example, many Mexican-Americans in some of the urban areas of the Southwest are employed in agriculture at least for several months of the year.

* * *

The subject matters selected for Advance Reports vary widely, as is illustrated by the topics of those already released or scheduled for early publication, which are listed elsewhere. They depend, among other things, on work progress and on the possibility of analyzing even in preliminary form one facet of the over-all study without extensive reference to others. Generally, statistical investigations lend themselves more easily to early separate treatment than do the more intricate and interrelated subjects pertaining to attitudes or values or the interaction between the dominant society and the minority. Thus, the topics in this series should not be taken as any indication of the full range of materials to be included in the final product, nor should it be considered a reflection of the relative importance of various substudies conducted in the course of the research work now under way.

Advance Reports are preliminary and subject to revision. They represent the results of individual scholarship and are issued without the benefit of consultation with academic or community advisers. Formal review and editing are reserved for the final study which will weave the materials included in the Reports, as well as others, into an integrated framework of analysis.

* * *

It is almost commonplace to say that a minority is a minority not necessarily because of inferior numbers but because it is apart, or held apart, from the rest of the population. Separation can and does express itself in many ways — in jobs, schooling, income, language, social relations, political participation, and so forth.

The present Report addresses itself to one kind of separation: urban residential segregation. This kind of segregation is significant not only in itself — for about four-fifths of the Mexican-American group live in cities — but because it is in all probability highly correlated with other types of separation. Thus, the residence segregation in cities can be taken as an indicator of the minority's general status in American society.

Moreover, different degrees of ethnic concentrations in urban neighborhoods have a significant bearing on other aspects of the minority's struggle for equal opportunity. They determine de facto school segregation. They influence the potential for ethnic block votes and the emergence of the minority's own candidates for public office. They may facilitate or impede social protest movements. Large concentrations tend to preserve ethnic institutions of all kinds.

The authors of the present Report break new ground. This is the first study of residential segregation of the urban Mexican-American population. The city ghetto, of course, has long been a favorite subject of sociologists and social reformers, and housing segregation of ethnic or racial minorities has had a great deal of attention from scholars, action groups and, in recent years, legislators and the courts. But the best information available to-date on the residential differentiation of Mexican-Americans appears in the form of dotted city maps — and even this rudimentary device exists for only few places. The more refined and systematic measurements offered here for 35 cities in the Southwest represent an important contribution.

Second, the Report taps the analytical potential provided by the presence of two large urban minorities in the Southwest, Mexican-Americans and nonwhites, which allows study of residential segregation in a comparative framework and in greater depth. Thus, the authors are able to describe and measure three main types of segregation, that of the Mexican-Americans from "Anglos." Negroes from white Anglos, and Mexican-Americans from Negroes. While conditions vary greatly from city to city, a clear rank order emerges from the findings. The most acute

segregation exists between Negroes and white Anglos. A less severe degree of segregation is observed between Mexican-Americans and Negroes. The least severe but still substantial segregation is that between Mexican-Americans and Anglos. In every one of the 35 cities Mexican-Americans are noticeably less separated from the dominant group than are Negroes.

Third, the Report suggests a typology of cities based on the extent of the various types of segregation and their mix. Which cities are relatively "good" on this criterion, and which ones are relatively "bad"? This approach highlights one of the more general questions pursued in our research work. The Southwest offers members of minority groups a large variety of environmental conditions ranging from cosmopolitan metropolises to highly provincial backwoods towns. How do these variations affect the status of minorities? The typology of cities helps to answer this question in respect to residential segregation patterns.

Fourth, the authors venture into the difficult territory of exploring the determinants of residential segregation—or, in the more guarded language of social scientists, the factors significantly associated with different degrees of segregation. Some of the clichés one hears in everyday conversation indicates the importance of this subject as well as its complexity. "People of the same kind like to live together" (voluntary segregation). "People live in separate neighborhoods because they are poor and not because of ethnic or racial segregation" (economic determinism). "Ethnic or racial minorities are forced to live in ghettoes because of housing discrimination" (involuntary segregation). In each of these statements one, and only one, factor is singled out as <u>the</u> explanation of a highly complex phenomenon.

Alas, the available data and analytical techniques are still too crude for sifting and weighing the determinants of residential separation in a wholly satisfactory manner. The multiple regression analysis presented in the Report suggests that specified economic, cultural, and demographic factors account for a substantial part of the inter-city variances in housing segregation; and the importance of these factors differs with the type of segregation (separation of each of the two minorities from the dominant group and inter-minority separation). But the analysis leaves uncomfortable margins of "unexplained variances." As the authors point out, discrimination in housing markets is one of the factors hidden in these unexplained variances; yet it is a fact of live though its influence cannot be fully assessed with the measures available for analysis.

The point of this observation is that social-science research here and there will reach a barricade when it pushes the frontiers of knowledge, as do the much admired physical sciences. The Mexican-American Study Project will inevitably share this experience. But to-day's unfinished business becomes the challenge of tomorrow. Our work on residential segregation has

already added considerably to the stock of factual information and analysis. It is hoped that this Report will stimulate further research to fill the still remaining gaps.

Leo Grebler, Director
Mexican-American Study Project

Authors' Acknowledgements

The authors are indebted to the Director and staff of the Mexican-American Study Project for their advice, assistance and support. Leo Grebler reviewed drafts of the manuscript and his comments and suggested revisions were invaluable in the preparation of the final report. We deeply appreciate his contributions which were given most generously. Also, we are grateful to Ralph Guzman for his many thoughtful suggestions for changes.

Particularly helpful assistance in preparing statistical data was provided by Grace Marshall, Joyce Chamberlain, David Broome, John Chang and Mandy Lin. Rose Altman, Connie Bishop and Margie Hickman patiently typed several drafts and we would like to express our gratitude to all of them.

We received many valuable ideas and comments from our academic colleagues, in particular O. Dudley Duncan, Robert Manning, Karl Taeuber and John Tomaske.

Last but not least, the authors gained important insights from discussions with members of the Los Angeles and San Antonio Community Advisory Committees. Their understanding of the problem of residential segregation goes beyond the concerns of academic inquiry. Hopefully, the authors have retained some of the spirit of those for whom residential segregation is an important fact of life and not an abstraction.

As always the authors bear full responsibility for the content and findings of the study, and any errors or omissions.

The present report is an extended version of a paper on "Residential Segregation" delivered at the meeting of the American Sociological Association in Chicago in August 1965.

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I. Introduction

This report is in a long tradition of research on ethnic and minority ghettoes in American cities. 1

Here we focus on segregation of Spanish-surname (largely Mexican-American) persons from Anglos on the one hand and from Negroes on the other hand. We also examine segregation of other subpopulations from each other in 35 Southwestern cities. 3

II. A Sketch of Urbanization Patterns

With regard to the extent of urbanization, Mexican-Americans are generally less urbanized than either Negroes or Anglos in the five Southwestern states. However, by far the largest majority of them were living in cities by 1960 — as was also true for Anglos and Negroes (Chart A). There are substantial differences in patterns of urbanization from one state to another (Charts B, C), though there is an over-all trend toward increasing urbanization of the two major minorities — Mexican-American and Negro. 5

The processes of urbanization of Mexican-Americans in the Southwest have some special features by contrast with other ethnic ghettoes in the United States. Today's barrios or concentrations of Mexican-Americans have diverse origins, some as the center of the original settlement of the city, some as remnants of agricultural or other labor camps. 10

III. Measuring Residential Segregation in 35 Cities

Using a measure of segregation ranging from 0 to 100, we calculate the degree of segregation of (a) Anglos from all others, (b) Mexican-Americans from Anglos, (c) Negroes from Anglos. We also examine segregation of minorities from each other: (d) Mexican-Americans from Negroes, (e) Mexican-Americans from other nonwhites, (f) native-born Mexican-Americans from foreign-born Mexican-Americans. These figures are shown for 35 Southwestern cities in Table 2, (p. 16) . . . 15

Examining only the three major forms of segregation, one finds that Negro segregation from Anglos is generally the highest, Mexican-American segregation from Negroes second highest, and Mexican-American segregation from Anglos the third. There is more variation in the latter two than in the first, as shown in Table 3. 18

The various types of segregation are related to each other. For example, if Negroes are highly segregated from Anglos in a city, Mexican-Americans are also likely to be segregated. The degree of relationship between the forms of segregation is shown in Table 4. 19

In all cities, Negro segregation from Anglos is the highest. In most cities, Mexican-Americans are more segregated from Negroes than they are from Anglos, but in nine cities the reverse is true. Each city has a distinctive pattern of relationships between minorities, which these measures of segregation express. The 35 cities can be classified by pattern of segregation as well as by degree of segregation, as indicated in Table 5. This classification may have a relationship to the minorities' images of the various cities. 20

IV. Correlates of Residential Segregation

The concluding effort to analyze the three major kinds of segregation (Negro from Anglo, Mexican-American from Negro, and Mexican-American from Anglo) is an attempt to discover what factors are most highly correlated with the segregation. We expected six kinds of factors to be associated with residential segregation of all forms (see list, pp. 24, 25) 23

In our exploratory analysis, we found some factors not meaningfully associated with any kind of segregation. Such factors included our measure of the community's "taste for discrimination," the proportion of Mexican-Americans who were foreign-born, and the state of the housing market. Others, however, warranted further analysis. 25

The final analysis of such factors shows that segregation of Mexican-Americans from Anglos was the most fully accounted for, and segregation of Mexican-Americans from Negroes the least fully "explained" by the factors selected (Table 6). City size is associated with all types of segregation: the larger the city, the greater the segregation. Our measure of traditionalism or familism is also associated with all three types of segregation. The economic factor (ratio of the relevant populations' incomes) is associated with Negro segregation from Anglos, and less strongly with Mexican-American segregation from Anglos, but not significantly with Mexican-American segregation from Negroes. Similarly, the composition of the minority population (i.e. the relative preponderance of Negroes or Mexican-Americans) is associated both with Mexican-American segregation from Anglos and with Negro segregation from Anglos, but not with Mexican-American segregation from Negroes . 29

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I. INTRODUCTION

The American ghettoes of the East and Midwest disturbed social observers and analysts even before Jane Addams established the famous Hull House in the ethnic slums of Chicago. Many reformers and ideologues, particularly in the 19th Century, viewed such slums as an unending source of evils that threatened American values. These threats they perceived as ranging from anarchy and sedition to vice and disease. The foreign-born—Jewish, Chinese, Italian, German and others—were conceived as serious problems for the emergent American way of life.[1]

But as scholarly interest became engaged, quite gradually over a period of time, the ethnic slum was no longer viewed as such a threat. The ethnic ghetto soon came to be considered a largely transitory phenomenon. The Little Sicilies, Little Tokyos, Chinatowns, and Little Polands were seen to succeed each other in waves. New immigrants took the place of children who had disappeared into anonymous housing dispersed throughout the city. Sociologists of the 1920's were fascinated by the process. Their interest culminated in Wirth's The Ghetto,[2] first published in 1928. As the years passed, residual ethnic centers came into popularity as tourist attractions.[3] Perhaps this popular favor of the unusual and the exotic reached its high point when the recent fight to preserve the area near Hull House in Chicago from urban renewal resulted, ironically, in a decision to preserve only Hull House itself. The remnants of poverty-stricken residents whom Hull House was supposed to serve were then forced to move.

In time, even the non-sentimentalist began to see the ghetto less negatively. As Wirth said:

> It [the ghetto] indicates the ways which cultural groups give expression to their heritages when transplanted to a strange habitat; it evidences the constant sifting and resifting that goes on in a population, the factors that are operative in assigning locations to each section, and the forces through which the community maintains its integrity and continuity.
>
> Finally, it demonstrates the subtle ways in which this cultural community is transformed by degrees until it blends with the larger community about it, meanwhile reappearing in various altered guises of its old and unmistakable atmosphere.[4]

Thus, the ethnic ghetto was viewed as an adaptive device. It would permit the newcomer to American life to move gradually and less traumatically into assimilation. The ethnic neighborhood would include landsmänner familiar with the new immigrant's expectations and willing to provide him with a comfortable milieu. Food stores, newspapers, neighbors, churches, schools and politicians assured the newcomer that his native way of life was worth preserving. To be sure, some

observers noticed that the ghetto sometimes preserved the foreign way of life longer than they felt necessary. But in most cases the immigrants' children did well in the new country. Gradually, even the Chinese and the Jews (who appeared most resistant to movement out of their segregated areas) left the ghetto.

In the 1920's scarcely any students noticed the beginning of the northern Negro ghetto, first observable shortly after World War I. The Negro ghetto was not like the foreign ghettos. It was not going to disappear. On the contrary, it was growing as increased numbers of Negroes came from the South. Gradually this ghetto came to be seen not as an adaptive device easing the newcomer into the mainstream of American life, but as a social mechanism locking the Negro into a subordinate status. It notably seemed to ensure a low quality of schooling and public facilities, and to impede general access to American values. In time public opinion was aroused. Legal and other remedial measures were undertaken, in many cases experimentally. Quite generally they were a failure. The Negro ghetto continued to grow. It appeared that residential segregation would be a continuing feature of American urban life.

The recently published work of the Taeubers has demonstrated and quantified the well known fact that residential segregation of Negroes from whites is widespread and high throughout all urban areas of the United States.[5] Inter-area differences are minor; they are slightly associated with city size, the proportion of nonwhites in cities, and the region in which the city is located.[6] The phenomenon of Negro residential segregation is so pervasive in this society, however, that variations from one city to another are relatively small and offer limited scope for analysis.[7]

In contrast, as Lieberson has shown, residential segregation of contemporary immigrants and their children has become much more varied, both across ethnic groups and across communities.[8] Among other things, it is associated with the cultural, social and economic characteristics of the foreign-stock population including in particular their educational attainment, recency of immigrant status, and in general the degree of their acculturation.

These recent and broad-ranging studies analyze residential segregation as one dimension of general integration into our society — on the one hand of America's most enduring minority and on the other hand of its more or less assimilated nationality groups. They represent a significant shift in emphasis from description of particular city ghettoes and their functions for the

immigrant to attempts to explain the kinds of factors generally associated with clustering of minorities in urban areas. The analysis of Negro segregation tends to stress characteristics of communities somewhat more than those of the minority population itself. By contrast, the most fruitful variables relating to the segregation of foreign-stock populations tend to be found in the background, culture, and cohesiveness of the particular ethnic group, rather than in the characteristics of the communities in which they live.

Analysis of the residential segregation of Mexican-Americans in the Southwest is one of the building blocks necessary to an understanding of the socio-economic position of this minority. Mexican-Americans as a group are differentiated from the dominant population in many respects, such as jobs, schooling, income, family size, and cultural values. Residential segregation, whatever its causes, is one of the significant dimensions of separation. To date, it has at best been described and mapped in single localities but not adequately measured. The extent of segregation in different localities has never been compared, nor has any attempt been made to analyze the differences from one urban place to the other.

In addition, analysis of residential segregation of Mexican-Americans in the Southwest offers an opportunity to obtain fresh general insights into one of the most pervasive and significant facts of urban life in the United States. In the Southwest (defined to include Arizona, California, Colorado, New Mexico, and Texas), there are two large population groups generally recognized as enduring minorities: Mexican-Americans and Negroes. Hence it is possible to examine how sharply not only one minority but two minorities with different historical relationships to the region are segregated from the dominant population in given urban milieus.

The socio-economic status of both groups is considerably below that of the dominant population.[9] Both groups have a long history of subordination, which ranges from lynching to devious and hardly perceptible deprivations of civil rights.[10] In addition, large numbers of Mexican-Americans, like Negroes and unlike most members of national ethnic communities in this country, tend to be physically distinctive. Hence, a comparative study promises to add new dimensions to the usual analysis of residential segregation of one minority from the dominant population.

The unusual ethnic mixture and history of settlement in the Southwest make it possible to observe still another kind of segregation — that of minorities from minorities. We can analyze the segregation of Mexican-Americans from Negroes. We can examine Mexican-American segregation from yet another group of nonwhites — Orientals and Indians. It is probable that in this kind

of segregation, issues related to dominance and subordination are less important and other factors play a larger role. Finally, since a large percentage of Mexican-Americans are of foreign stock, the analysis may reveal the extent of segregation of generations from one another within the same ethnic group.

This report will first describe the subpopulations involved in the study, the extent of their urbanization, and some relevant general patterns of their distribution over different kinds of urban areas. Next, the report turns to a descriptive analysis of residential segregation found in 35 cities of the Southwest. Finally, an attempt will be made to explain how differences in segregation between cities and various groups of their population are related to a number of significant socioeconomic factors. This last part is in the nature of an exploration into difficult and yet incompletely charted territory.

Notes to Chapter I

1. John Higham, Strangers in the Land: 1860-1925 (New Brunswick, New Jersey: Rutgers University Press, 1955).

2. Louis Wirth, The Ghetto (Chicago: University of Chicago Press), 1928.

3. See, for example, Kate Somon, New York, Places and Pleasures (New York: Meridian Books, Inc., 1959), especially chapter 4 "Walks."

4. Albert J. Reiss, Jr., ed., Louis Wirth: On Cities and Social Life (Chicago and London: The University of Chicago Press, 1964), p. 85. The quotation is from an article by Wirth entitled "The Ghetto," first published in the American Journal of Sociology, XXXIII (July, 1927), 57-71.

5. Karl E. Taeuber and Alma F. Taeuber, Negroes in Cities (Chicago: Aldine Publishing Company, 1965).

6. As discussed in Karl Taeuber, "Negro Residential Segregation," Social Problems, Vol. XII (Summer, 1964), 42-50.

7. In the research reported in their book, the Taeubers have chosen a longitudinal strategy, analyzing changes in residential segregation from 1940 to 1950 and from 1950 to 1960 in the light of other "types of change which might affect population redistribution within a city." Op. cit., p. 70.

8. Stanley Lieberson, Ethnic Patterns in American Cities (New York: The Free Press of Glencoe, 1963).

9. This statement will be subjected to more careful analysis in a separate report in this series of Advance Reports.

10. See Ralph Guzman, "The Mexican-American Community," in Eugene Dvorin and Arthur Misner, eds., California Politics and Policies (Palo Alto: Addison-Wesley Co. in press).

II. A SKETCH OF URBANIZATION PATTERNS

Before proceeding to the analysis of residential segregation in the Southwest, we will comment briefly on the extent and patterns of urbanization of the three population groups with which this report is primarily concerned: White Anglos, Mexican-Americans, and Negroes.* The number of persons in the two minority groups included in this study is shown in Table 1, together with general population data for 1950 and 1960. Charts A, B, and C present a picture of their urbanization at these two benchmark dates.

Extent of Urbanization 1950-1960

Unfortunately, the data available on these populations do not permit a longer historical perspective. The major obstacle is the changing Census identification of Mexican-Americans. Prior to the present "White persons of Spanish surname" category (which includes primarily Mexican-Americans), a variety of definitions was employed.[1] The present one was established only in 1950, and data from the 1950 and 1960 Censuses on "white persons of Spanish surname" are not comparable with earlier data collected according to other definitions. General changes in rural and urban definitions made after 1940 also complicate the problem.

Table 1

Composition of Population in Five Southwest States Combined, 1950 and 1960

	Number		Percent of Total		Percent Increase
	1950	1960	1950	1960	1950 to 1960
Total	21,053,280	29,304,012	100.0	100.0	39.2
All White	19,223,082	26,576,041	91.3	90.7	38.3
Spanish Surname	2,289,550	3,464,999	10.9	11.8	51.3
Other ("Anglo White")	16,933,532	23,111,042	80.4	78.9	36.5
All Nonwhite	1,830,198	2,727,971	8.7	9.3	49.1
Negro	1,494,189	2,171,444	7.1	7.4	45.3
Indian	131,912	188,694	0.6	0.6	43.0
Japanese	92,356	170,647	0.4	0.6	84.8
Chinese	63,344	103,794	0.3	0.4	63.9
All Others	48,407	93,392	0.2	0.3	92.9

Source: 1950 Census of Population, Vol. II, parts 3, 5, 6, 31, 42 Table -14; and special reports P-E No. 3C, Table 2. 1960 Census of Population, Vol. I, parts 4, 6, 7, 33 and 45, Table 15 and 96; and PC (2) 1B, Table 1.

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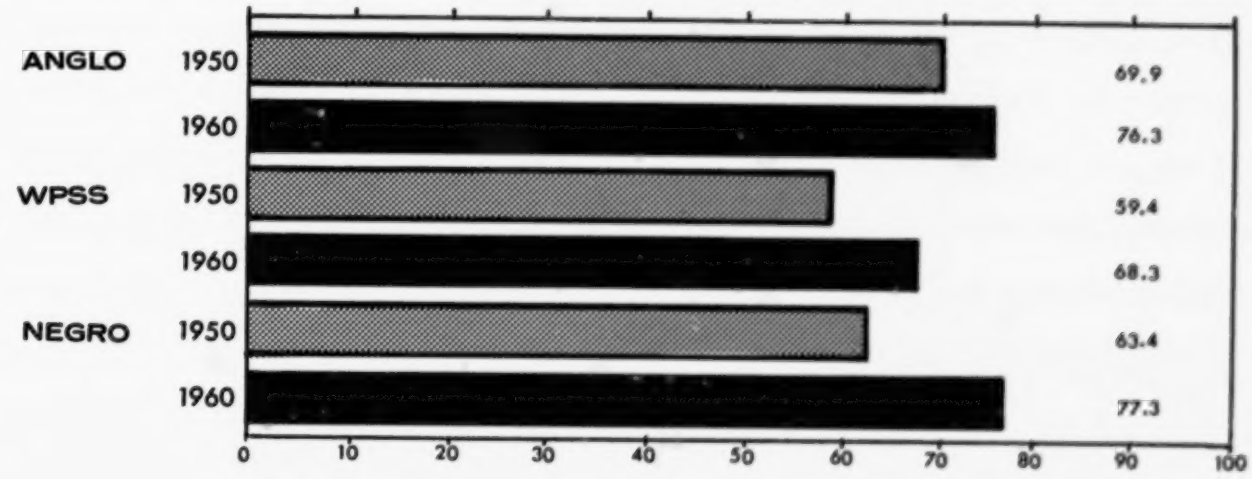
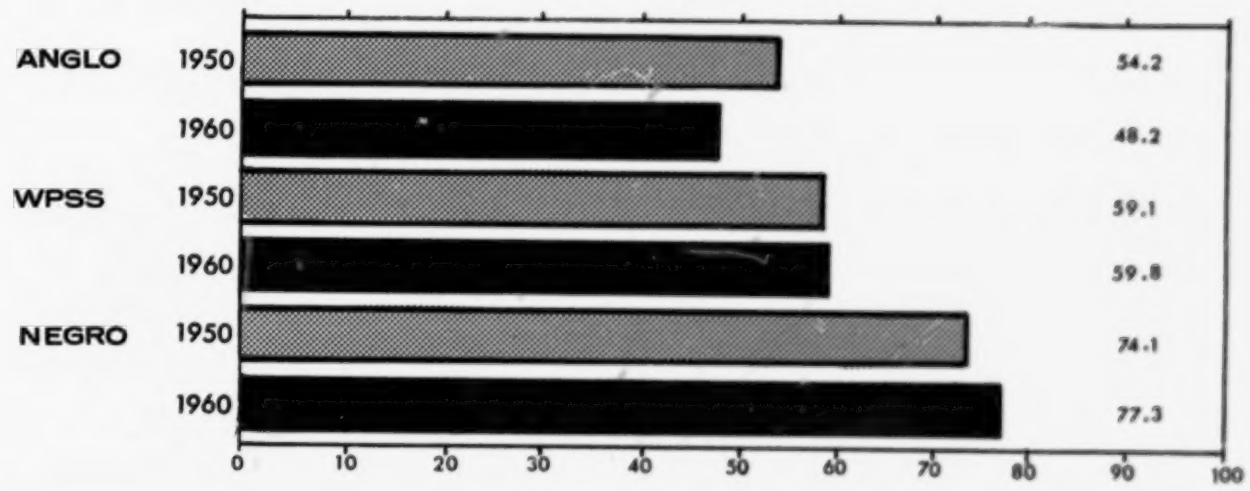
*Throughout this report, the term Anglos denotes whites other than white persons of Spanish surname. The latter term is used interchangeably with Mexican-Americans.

Chart A

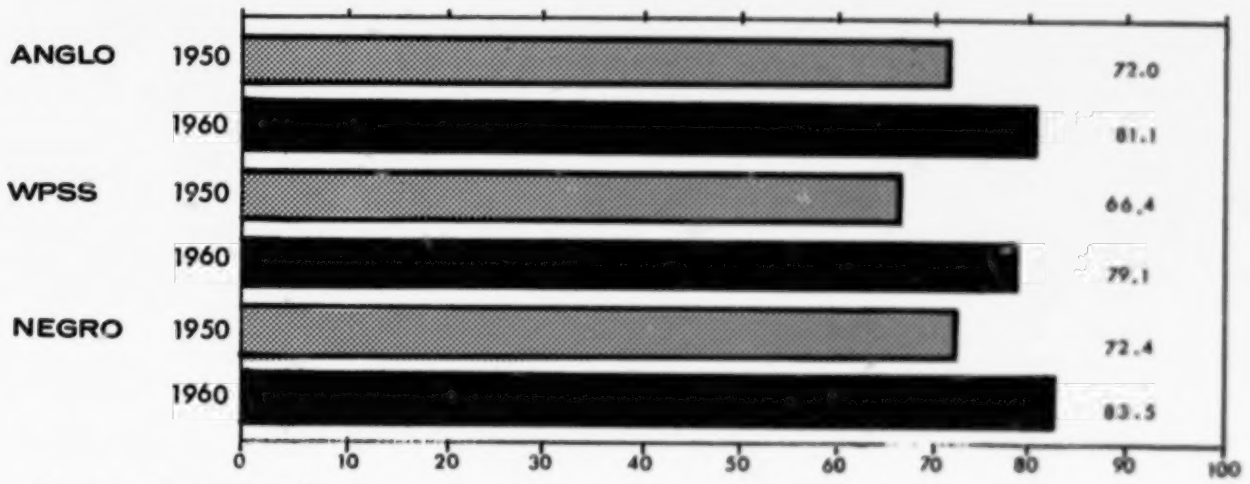
PER CENT OF EACH SOUTHWESTERN SUB-POPULATION LIVING IN METROPOLITAN AREAS, 1950 and 1960



PER CENT OF METROPOLITAN RESIDENTS LIVING IN CENTRAL CITIES, 1950 and 1960



PER CENT OF EACH SOUTHWESTERN SUB-POPULATION LIVING IN URBAN AREAS, 1950 and 1960



Source: Appendix A

However, even the short-range perspective of a comparison between 1950 and 1960 gives some insight into major differences in the urbanization of the two minorities and the dominant population. Generally, all three subpopulations were already highly urbanized by 1950 (Chart A). Sixty percent or more of each group were city dwellers, and this figure holds whether one looks at the proportions found in metropolitan areas or those in urban communities which include small towns as well as large cities.[2]

The larger minority, the Mexican-Americans, were the least urbanized group in 1950. Depending on which type of area is examined, either Anglos (with 70 percent in the metropolitan areas) or Negroes (with 75 percent residing in urban places) were the most urbanized. By contrast, only 60 percent of the Mexican-Americans lived in metropolitan areas.

By 1960 the process of urbanization was further advanced for all three groups. Negroes showed the largest urban concentration no matter which area definition was used, with 77 percent of all Southwestern Negroes living in metropolitan areas and 84 percent in urban places. Anglos followed close behind. The Spanish-surname population still lagged behind the others, although their proportion in metropolitan areas (68 percent) was almost as high as that of Anglos in 1950. The 1960 concentration of Mexican-Americans in urban places far exceeded that of Anglos and Negroes in 1950 and closely approximated their 1960 concentrations.

Even more revealing is the distribution of the three subpopulations within metropolitan areas, also shown in Chart A for the Southwest. The decade 1950-1960 witnessed a national pattern of redistribution of the dominant Anglo population from central cities to outlying portions of the metropolitan areas. In short, the Anglo population was becoming suburban during this decade.[3] The Southwest was no exception to this pattern. By 1960, more than half of the metropolitan Anglos lived outside of central city areas, both nationally and in the five states under consideration. This decline in central city concentration of Anglos occurred at the same time that many central cities — particularly in the Southwest — were annexing large territories.[4]

In contrast, Negroes in metropolitan areas became more concentrated in the central cities during this decade. More than three-quarters of the metropolitan Negro population were living in the central cities by 1960, both nationally and in the Southwest.[5] It seems likely that the pattern of Negro distribution reflects their shift to the cities from rural residence rather than a redistribution within the metropolitan areas.

Mexican-Americans showed little change in their tendency to concentrate in central cities

during the decade. More significantly, in both 1950 and 1960, two-fifths of this population continued to live in the outlying portions of the metropolitan areas. The problem of accounting for annexations makes it impossible to reach firm conclusions on trends. It does seem clear, however, that the Mexican-American pattern is different from both Anglo and Negro patterns. There was no strong surge to the suburbs, as appeared among the Anglos, and the urbanization of Mexican-Americans did not mean almost exclusive central-city concentration, as it sometimes did for Negroes.

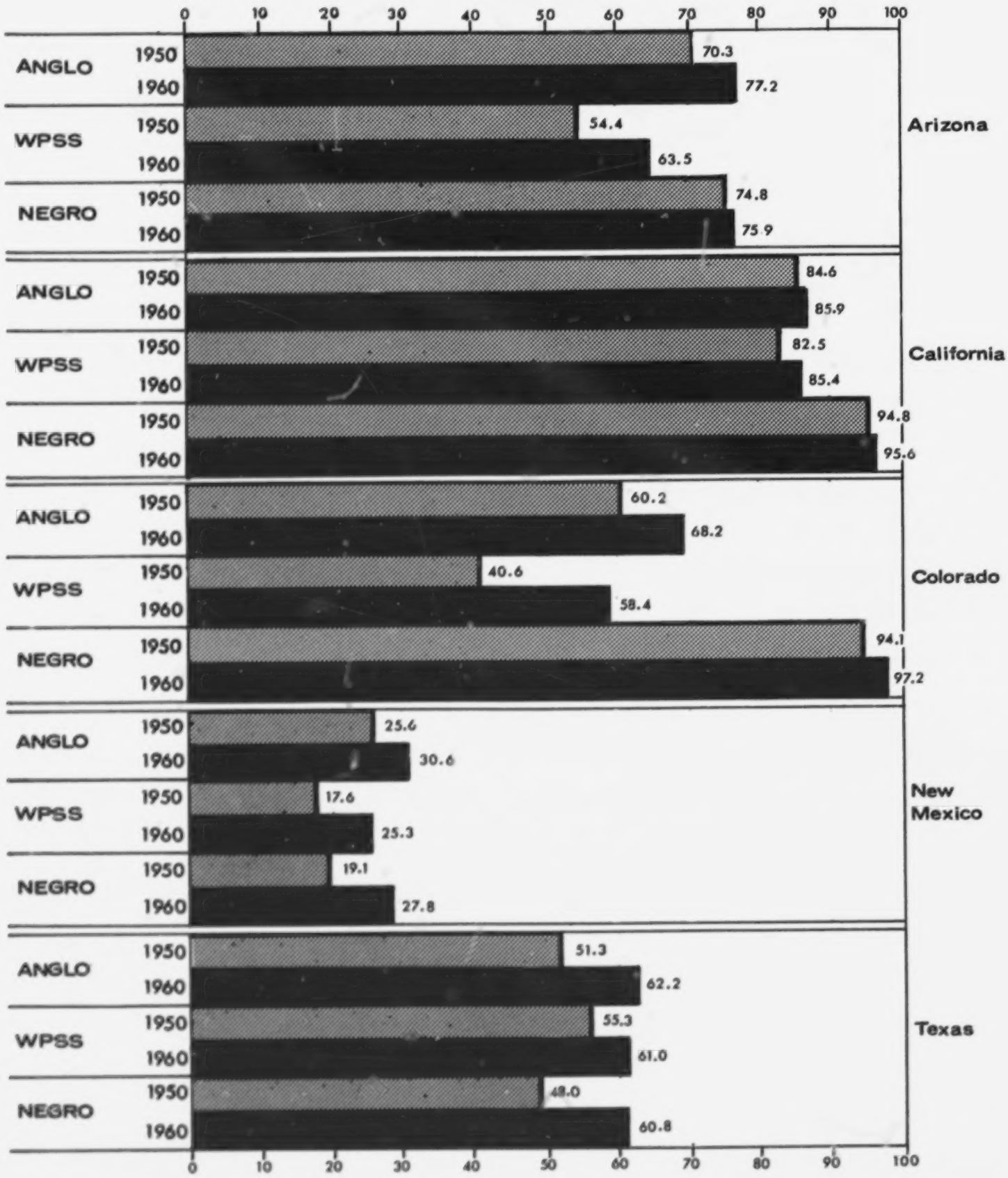
The over-all patterns and trends of urbanization in the Southwest combined conceal important differences between the five states (Chart B). By reference to the proportion of people living inside and outside metropolitan areas we can gain some insights into these differences between areas. With only one exception, in both 1950 and 1960, California evidenced the highest proportions of people living in these large urban complexes among all three populations. The exception is Colorado where in 1960 Negroes were slightly more concentrated in metropolitan areas than in California. (Colorado also showed the sharpest differences between the urbanization of the three subpopulations in 1950 and 1960, but these differences had diminished by 1960.) For all three subpopulations, New Mexico—with Albuquerque as its sole metropolitan area—had the lowest metropolitan concentrations at both points in time.

In every state but Texas the Spanish-surname population was less concentrated in metropolitan areas than either Negroes or Anglos in both 1950 and 1960. In Texas, rather surprisingly, the proportion of Spanish-surname persons in metropolitan complexes was higher than for Anglos in 1950, though this was not the case in 1960. And in both 1950 and 1960 a slightly smaller percentage of Texas Negroes than Mexican-Americans lived in metropolitan areas, though these differences diminished during the decade.

The distribution of the subpopulations between central cities and outlying areas showed only one exception to the regional pattern (Chart C). New Mexico was the only state in 1960 with a lower proportion of Negroes than of Anglos living in central cities. California, Colorado, and Texas all experienced a decline in the proportion of Anglos concentrated in central cities between 1950 and 1960. For Spanish-surname persons this was the case in California and Colorado, and in Colorado's and New Mexico's metropolitan areas the share of Negroes in central cities was also slightly reduced. In the remaining states the proportion of the subpopulations in central cities increased.

Chart B

PER CENT OF EACH SUB-POPULATION IN METROPOLITAN AREAS
BY STATE, 1950 and 1960



Source: Appendix A

As was already mentioned, the 1950-1960 changes in urbanization reflect partially the annexation of territory by central cities. Annexation is most particularly an issue in the Southwest with its rapid general growth. Sixteen of the 35 American cities of 25,000 or more population that rank highest in annexed populations, for example, were central cities of the Southwest. This is just one indication of the general fluidity in patterns of urban development characteristic of the region, which includes some old and well-established cities while others have mushroomed into large metropolitan centers in just a few years. After World War II, many cities reached out to encompass both new developments and older fringe-area villages. Meanwhile, many new residents entered the metropolitan areas, and older residents changed their locations. As a result, the quantitative impact of annexations on differential population growth cannot be determined with any degree of precision.

Origins of Mexican-American Ghettoes

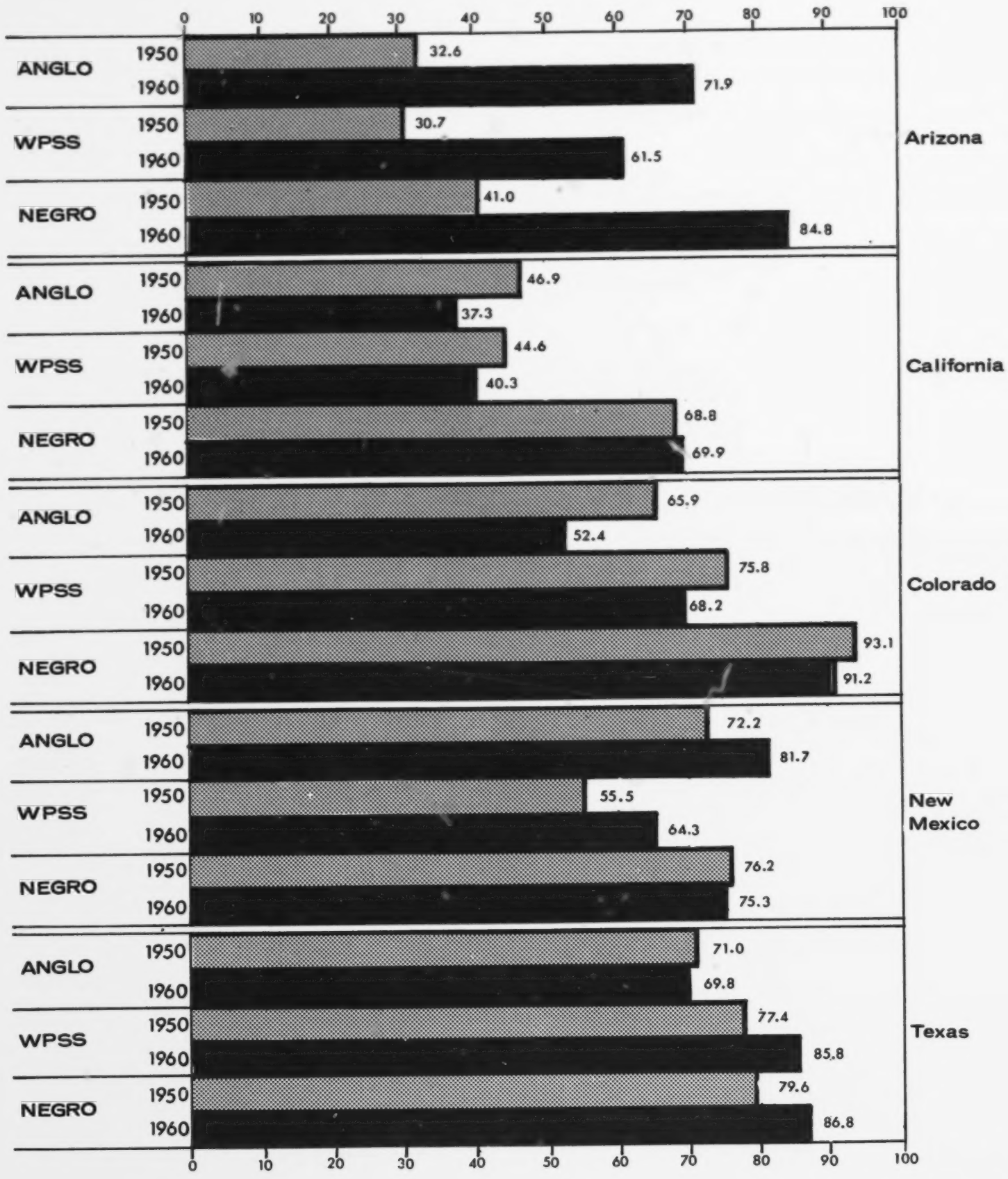
The differences in the urbanization of Mexican-Americans, Negroes, and Anglos have important implications for the analysis of patterns of segregation. It can be argued that American ghettos, either ethnic or Negro, have largely been products of the relatively sudden appearance of a subpopulation in a city and their settlement in cheap housing, often in the older central areas of the city. This has probably been true for most of the highly visible segregated groups in the nation and seems to be true today of many Negro settlements of the Southwest. But the data for Mexican-Americans do not entirely fit this hypothesis.

To be sure, there are central-city "downtown" ghettos, which have large concentrations of Mexican-Americans, apparently like any "Little Italy." For the Mexican-American these areas supply shopping facilities, professional services, newspapers, movies, immigration experts, and so forth. But many have origins quite different from the little Italies. Many of the cities in the Southwest were first settled by Mexicans and organized around "plaza" areas which served a variety of functions. With the coming of the railroads and the new settlements by Anglos many of the plazas, for example in Albuquerque, were bypassed when transportation terminals, nodes and other central places developed some distance away. With new urban growth gravitating around the nodes and terminals the "plaza" area remained as a backwater. It is such areas that form the focus of many contemporary "downtown" Mexican-American concentrations.

Very rapid urbanization of the Southwest brought the absorption of other Mexican-American barrios whose history can be traced to their function as former agricultural labor communities.

Chart C

PER CENT OF METROPOLITAN RESIDENTS LIVING IN CENTRAL CITIES, BY STATE, 1950 and 1960



Source: Appendix A

The swift shift of agricultural land to urban use meant that the resident Mexican-American population was also absorbed into the stream of urban activities. The ethnic character of the enclave remained, but the population ceased to be concentrated in agricultural occupations. Typical of these cases in southern California is Pacoima in the midst of the San Fernando Valley tract developments, and pockets in the city of San Diego represent the same kind of history. In a general way, this process of envelopment is roughly paralleled in all parts of the Southwest where urban development has been precipitate.

In some places agricultural enclaves were established and remain at the fringe of the urbanized parts of metropolitan areas. Many of these have retained their agricultural function and serve as labor markets. In a few the population engages partially in urban and partia''y in agricultural pursuits, holding different jobs in different seasons or working intermittently in both types of occupation. Eventually these communities may also be enveloped. The shack-towns and fringe areas around Fresno are illustrations of this phenomenon.

Still another type of enclave is the former labor camp which brought together a pool of Mexican-American railroad or other gang workers and where a small population remained after the purposes for which the camp was established had been realized. An example of this can be found in the Sawtelle area of West Los Angeles.

To reiterate, the Mexican-American ghettos in the urban areas of the Southwest are found not only in and around the older central parts of cities, although concentrations adjacent to downtown areas are common enough. Many of the ghettos have differing origins. This is especially true in the present suburbs. Some have disappeared. To trace the original functions of the remaining enclaves is difficult. Their history goes largely unrecorded and is often shrouded in myths.

There are a few places where Mexican-Americans are <u>not</u> found in subordinate enclaves but form a social as well as numerical majority. This phenomenon is more frequent in small towns, like Rio Grande City and Presidio, Texas, but characterizes some larger cities as well. Laredo, Texas, is possibly the best illustration. Only in isolated cases, such as the Indian reservations, does such a pattern exist among other American ethnic groups.

Irrespective of the origins of the ghettos, there is little question that both Mexican-Americans

and the more recent Negroes are visibly segregated in the Southwest. There is m marked variation, however, in the general position which these two minorities hold from one city y to another, both in relation to each other and in relation to the dominant population. For exampl le, there is probably more discrimination against Negroes in cities of east Texas, and against Mexican-Americans in parts of south Texas, than against either minority in the cities of nort rthern California. And the minorities themselves differ greatly from city to city in their standin ng relative to one another or Anglos. For example, in one city, there are many Mexican-Americans a and few Negroes; in another city, the reverse is true. Generally, Mexican-Americans enjoy som newhat higher income than Negroes, but in a few communities the opposite holds. This variat ation can be found along many dimensions.

In short, the minorities have histories of urbanization in the region which h differ markedly from each other. Further, their status varies sharply from one city to another r. With some exceptions, however, these differences tend to occur within a common range: : both groups are indeed minorities. These diversities and commonalities offer excellent oppo ortunities for the development of general propositions about residential segregation. Such propos sitions can be advanced without running the risk that they are relevant only to a minority whic h may have some unique characteristics. Given the differences between these two minorities, , we would expect some corresponding differences in the correlates of residential segregation. The e diversity present within this region permits a comparative analysis of the extent to which th he minorities are "ghettoized" and of the extent to which this "ghettoization" is related to simil ar cultural, economic and demographic-ecological factors. This comparative approach, of cours se, has no necessary relationship to <u>change</u> in segregation patterns — an analytically and conc eptually different problem.

Notes to Chapter II

1. Long historical series are available on foreign stock Mexican-Americans s but these cover only a portion of this population. Third or more generation immigrants a are excluded, and the same applies to the many people who can trace their ancestry to pers sons living in the Southwest prior to certain areas becoming a part of the United States. The e first attempt at an all-inclusive reporting on Mexican-Americans was made in the 1930 Cen sus by reference to persons of "Mexican race." This definition was abandoned, and the 1940 Census reported only on persons of Spanish mother tongue. In the 1950 and 1960 definition of f "White Persons of Spanish Surname," 88 percent of the foreign stock portion are Mexican-Americans. Generally, the definition is thought to reflect reasonably well the number, distribution and characteristics of this population.

2. We have utilized the 1960 definitions of Standard Metropolitan Statistical Ar eas for purposes of making comparisons. That is, to the extent possible the 1950 data show SMSA populations as if these units had been established at that time. In a number of areas str ict comparability between 1950 and 1960 was not possible because data for "White Persons of Spanish Surname"

were not available in 1950. Specifically, for the following Texas counties no data were available for 1950 on WPSS: Collin, Denton, Johnson, Orange and Archer, all of which in 1960 were included in SMSA's. The SMSA's of Texarkana and Tyler were excluded for the same reason in 1950. In order to make the comparisons between the subpopulations we have excluded 1950 data for these counties for all the population groups. The percentage of the population in SMSA's for 1950 therefore is slightly understated. The 1950 and 1960 urban-rural definitions are approximately the same.

3. See U.S. Bureau of the Census, U.S. Census of Population: 1960, Selected Area Reports, Standard Metropolitan Statistical Areas, Final Report PC (3)-1D (Washington: U.S. Government Printing Office, 1963) Table 1, also reproduced in Taeuber and Taeuber, op. cit., p. 57.

4. The total population in areas of Southwest central cities which were annexed between 1950 and 1960 was 2,164,349. The increase in the percentage of Negroes and white persons of Spanish surname in central cities of SMSA's between 1950 and 1960 may be associated with annexation rather than increased concentration of these populations in the same geographic areas. However, no data are available to precisely determine the numbers involved. Importantly, the decline in the percentage of Anglos in central cities of SMSA's occurred despite annexation between 1950 and 1960. For further detail see Appendix A.

5. Because of annexations, one cannot be certain that the concentration of Negroes in central cities of the Southwest (as defined in 1950) rose during the decade. However, one can say at least that this concentration has remained at a very high level.

III. MEASURING RESIDENTIAL SEGREGATION IN 35 CITIES

Residential segregation means simply the separation of two or more subpopulations. But segregation implies more than mere physical distance; it implies social distance between those populations. Social distance is not invariably accompanied by physical distance: in some cities of the South, for example, Negroes and whites live on the same block, the Negroes living in the poor alley housing once reserved for slaves and the whites occupying the old mansions. But in most American cities, where social distance between subgroups is not so thoroughly embedded in all social institutions, residential segregation reflects the realities of social distinctions.

There are some societies in which social distance between populations has no negative connotations. These distinctive subpopulations may indeed occupy "separate but equal" housing. This is not the case in the United States. Here, social distance, whether expressed physically or otherwise, is usually accompanied by social deprivation. Segregated ethnic areas tend to be low-income areas with poor housing, reflecting the generally subordinate position of large proportions of the ethnic group. Chapter IV presents an analysis of some such correlates of residential segregation. In this chapter we will examine the patterns of segregation found in 35 central cities of the Southwest and discuss some of the processes leading to these patterns.

Analysis of Individual Cities

Residential segregation is measured here by an "index of residential dissimilarity" (D).[1] The index ranges in value from 0 to 100. Crudely, a score of 0 means that there is no segregation of a subpopulation from the other — that the members of both populations are randomly distributed throughout the city. A score of 100 means that the two populations are totally segregated — that all of the members of each population are concentrated in separate areas. These indexes were calculated from Census tract data from the 1960 Census of Housing and Population. A detailed technical discussion of the index is presented in Appendix B.

Table 2 shows the index scores for each of the 35 central cities included in the analysis. The first three columns present the segregation of the dominant Anglo white population — first from all others* in each city, and then from each of the two major minorities separately, Mexican-American and Negro. The data indicate that in every city, without exception, Mexican-Americans are less segregated from Anglos than are Negroes. In other respects, however, the table high-

* By "all others" is meant nonwhites and persons of Spanish surname.

Table 2

Indexes of Residential Dissimilarity for 35 Southwest Central Cities, 1960

City	Anglo vs. All Others[a]	WPSS[b] vs. Anglo[c]	Negro vs. Anglo[c]	WPSS[b] vs. Negro	WPSS vs. Other NW[d]	WPSS[b] FB vs. NB[e]
	(1)	(2)	(3)	(4)	(5)	(6)
1. Abilene, Texas	68.3	57.6	85.1	55.7	64.8	28.1
2. Albuquerque, New Mexico	53.0	53.0	81.7	62.4	34.9	26.2
3. Austin, Texas	62.9	63.3	72.1	66.1	69.9	9.5
4. Bakersfield, California	72.4	53.7	87.7	61.4	49.3	24.6
5. Colorado Springs, Colorado	55.4	44.8	74.0	53.8	32.6	50.5
6. Corpus Christi, Texas	73.7	72.2	91.3	51.0	46.9	13.2
7. Dallas, Texas	83.2	66.8	90.2	76.1	63.4	23.9
8. Denver, Colorado	64.9	60.0	86.8	68.0	39.9	32.9
9. El Paso, Texas	52.9	52.9	79.2	59.5	52.8	17.9
10. Fort Worth, Texas	74.8	56.5	85.4	78.1	58.8	29.7
11. Fresno, California	64.4	49.0	92.0	55.2	38.8	19.5
12. Galveston, Texas	58.1	33.3	73.8	52.1	42.3	10.8
13. Houston, Texas	73.2	65.2	81.2	70.9	52.1	14.0
14. Laredo, Texas	39.3	39.4	60.1	43.9	44.7	12.7
15. Los Angeles, California	68.7	57.4	87.6	75.7	50.3	23.8
16. Lubbock, Texas	74.4	66.0	94.4	89.0	65.8	16.3
17. Oakland, California	60.0	41.5	72.2	56.4	40.5	21.0
18. Odessa, Texas	81.8	75.8	90.5	29.2	68.2	11.8
19. Ontario, California	52.6	50.6	80.1	32.6	44.3	27.0
20. Phoenix, Arizona	62.8	57.8	90.0	60.7	40.6	21.6
21. Port Arthur, Texas	81.7	45.9	89.7	76.3	50.3	26.6
22. Pueblo, Colorado	39.9	40.2	57.0	44.1	44.5	39.4
23. Riverside, California	67.7	64.9	80.8	45.6	48.9	33.8
24. Sacramento, California	39.5	30.2	61.9	47.8	38.8	31.4
25. San Angelo, Texas	67.2	65.7	77.5	75.6	70.6	12.9
26. San Antonio, Texas	63.7	63.6	84.5	77.4	49.9	17.0
27. San Bernardino, California	70.6	67.9	83.5	35.2	44.6	20.9
28. San Diego, California	55.9	43.6	81.1	55.2	34.6	27.5
29. San Francisco, California	46.8	38.1	71.5	65.9	60.0	18.8
30. San Jose, California	42.5	43.0	64.7	44.4	42.7	17.0
31. Santa Barbara, California	48.6	46.5	76.7	37.6	9.8	17.8
32. Stockton, California	59.3	52.6	73.0	31.0	39.8	22.0
33. Tucson, Arizona	63.9	62.7	84.5	64.1	39.0	18.2
34. Waco, Texas	65.7	59.7	74.3	60.6	53.4	20.7
35. Wichita Falls, Texas	76.8	64.8	86.1	47.6	67.8	30.8

[a] White persons of Spanish surname plus nonwhites
[b] White persons of Spanish surname
[c] Anglo whites, i.e., whites other than Spanish surname
[d] Nonwhites other than Negroes
[e] FB = Foreign born; NB = Native born

lights sharp differences in the extent of segregation of various populations and wide variations from one city to another. For example:

1. Segregation of Anglos from all others ranges from a low of 39 in Laredo, Texas to a high of 83 in Dallas, Texas.

2. Segregation of Spanish-surname persons from Anglos ranges from a low of 30 in Sacramento, California to a high of 76 in Odessa, Texas.

3. Segregation of Negroes from Anglos ranges from a low of 57 in Pueblo, Colorado to a high of 94 in Lubbock, Texas.

The lack of uniformity is even more apparent when we examine the segregation of minorities from each other, shown in columns 4 and 5 of the table. This is a very important, though largely neglected issue in most discussions of minorities. In a few cities, Mexican Americans are less segregated from Negroes than they are from other non-whites, but in most places the reverse is true. Of course, the composition of the "other nonwhite" population differs from one area to another: it is predominantly Indian in Arizona and New Mexico, and predominantly Oriental in many California cities. In many parts of the Southwest, the "other nonwhite," together with the Mexican-American population formed the bulk of cheap labor supply. In various places, Mexican-Americans established symbiotic, economic, and other special relationships with these "others:" In Tucson and Albuquerque, for example, with the Indians,[2] in Phoenix with the Chinese merchants,[3] and in Los Angeles County with the Japanese. In most places in the region, Negroes are relative latecomers compared with these other minorities. The table shows that:

4. Segregation of Negroes from Spanish-surname persons ranges from a low of 29 in Odessa to a high of 89 in Lubbock.

5. Segregation of Spanish-surname persons from other nonwhites ranges from a low of 10 in Santa Barbara to a high of 71 in San Angelo.

Finally, the table shows the segregation <u>within</u> the Mexican-American minority — the foreign-born from the native-born persons of Spanish surname.

6. Intra-minority segregation of foreign-born from native-born persons of Spanish surname ranges from a low of 9 in Austin to a high of 50 in Colorado Springs.

Students of the Southwest will recognize that this last type of segregation reflects not only a generational split but an intra-minority cultural dissimilarity. The cultural differences are much sharper than the split between generations. We found in further analysis that a <u>high</u> order of segregation (dissimilarity index) is associated with a <u>low</u> proportion of foreign-born and with a low rate of increase in the Spanish-surname population. Thus, the highest 'Ds' emerged in two Colorado cities of our universe of 35 cities and the lowest appeared in the cities of south Texas.

The Spanish-surname population of northern New Mexico (not included in our set of cities) and southern Colorado consists predominantly of the descendants of persons who settled in this

area before 1848. More recent immigrants from Mexico (such as workers in the beet and melon fields of eastern Colorado) often met hostility from these older "Spanish-Americans." The higher 'Ds' in Colorado cities may well reflect this cultural rift. On the other hand, the lower 'Ds' in the cities near the Mexican border probably reflect the fact that little if any generational cleavage has developed. Mexican-Americans living in border cities seem to visit Mexico a great deal on a routine basis, and Mexicans come to the U.S. side with equal ease. This probably tends to reduce any sense of distance between Americans of Mexican descent and the Mexican-born.

Segregation Patterns

A more systematic analysis of the variation in these indexes is presented in Table 3, which shows both the average scores for each type of segregation and the average variability in the scores.

Table 3

Indexes of Residential Dissimilarity (D) for 35 Southwestern Cities, 1960: Means and Standard Deviation for All Cities

	Mean D	Standard Deviation
Anglo-white vs. all others	62.5	12.2
Anglo-white vs. Spanish-surname	54.5	11.4
Anglo-white vs. Negro	80.1	9.5
Spanish-surname vs. Negro	57.3	15.1
Spanish-surname vs. other nonwhite	48.4	12.9
Spanish-surname foreign-born vs. native-born	22.6	8.7

These data express in more condensed form observations drawn earlier from the vast array of figures in Table 2 and permit generalizations obscured by the wide range of variations from one city to another. Anglo segregation from Negroes is higher on the average than segregation of Anglos from the total non-Anglo population, and it is substantially higher than their segregation from Mexican-Americans. Also, the variability around the mean of segregation of Anglo-whites from Negroes is quite small compared to the other indexes.

Further, Table 3 shows a general pattern of inter-minority segregation. The segregation of Mexican-Americans from Negroes is greater (though more variable) than the segregation of Mexican-Americans from other nonwhites. Segregation of Mexican-Americans from Negroes

is also slightly greater on the average than the segregation of Mexican-Americans from the dominant population, though far more variable.

Is the segregation of one population systematically related to the segregation of another population in the same city? Yes and no. As Table 4 indicates, segregation of Mexican-Americans from Anglos is highly correlated with segregation of Negroes from Anglos across the 35 cities, that is, where one minority is highly segregated, the other is likely to be highly segregated also. Neither one, however, is very highly correlated with inter-minority segregation — that is, segregation of Mexican-Americans from Negroes. In contrast to what might be observed in a few isolated cases, the extent of a minority's segregation from the dominant group has little to do with the extent of its segregation from another minority. Negroes and Mexican-Americans do not necessarily form one big ghetto where either or both are separated from Anglos, nor do they necessarily separate into possibly hostile or competing ghettos where one or both are segregated. Finally, with respect to intra-minority segregation — of foreign-born from native-born persons of Spanish surname — there tends to be an insubstantial but inverse correlation with the other forms of residential segregation.

Table 4

Simple Linear Correlation Matrix Comparing Segregation of Various Subpopulations from One Another, 35 Southwest Central Cities, 1960

	(Items are the same as for numbers in rows)					
	1.	2.	3.	4.	5.	6.
1. Anglo-white versus All Others	1.00	.83	.76	.38	.53	-.12
2. Negro vs. Anglo-white		1.00	.67	.38	.24	-.10
3. Spanish-surname vs. Anglo-white			1.00	.20	.50	-.24
4. Spanish-surname vs. Negro				1.00	.38	-.08
5. Spanish-surname vs. Other Nonwhite (excl. Negroes)					1.00	-.25
6. Native-born vs. Foreign-born Spanish surname						1.00

Further inspection of the original array of scores in Table 2 suggests still other ways of viewing the data. Generally speaking, the segregation scores for the three principal types of segregation were found to rank as follows: the highest is that of Negroes' segregation from Anglos; the second highest is that of Mexican-Americans from Negroes; and the lowest score is that of Mexican-Americans from Anglos. This pattern exists in 26 of the 35 cities. It probably indicates the over-all ordering of social as well as residential distance between the three subpopulations, in which Anglos and Mexican-Americans are generally closer to each other than either group is to Negroes, and Negroes are less remote from Mexican-Americans than from Anglos.

In 9 of the 35 cities, however, there is a different ordering of the indexes. In this second group of cities, Negroes' segregation from Anglos also scores the highest, but the second highest segregation score is that of Mexican-Americans from Anglos, and the lowest is Mexican-Americans from Negroes. The two minorities — Negroes and Mexican-American — are both relatively highly segregated from the dominant Anglos, but not from each other.

These differences call for further analysis. The patterning of relationships between the minorities and the dominant population is distinctively different from one type of city to another. These differences seem to indicate that the minorities affect each other's chances for residential and other mobility. In other words, if we want to understand the Mexican-Americans' residential segregation we must look not only at Mexican-Americans' cultural and economic position in each city, but also at that of the Negroes. It seems likely that the processes producing segregation — especially of Mexican-Americans — differ in the two types of cities discussed. And it is likely that the consequences of segregation are different as well.

Though there are too few cities for elaborate analysis, we have classified these two types of cities into further subtypes (Table 5). In these subtypes we have tried to take account of the level of segregation in addition to the order of each type. Thus, if the score for segregation of Negroes from Anglos is above the mean, we call it "high"; if it is below the mean we call it "low". The type HHH means that all three major types of segregation scores are above average, and LLL means that all three scores are below average.

This new arrangement of the data shows that, generally, cities of the second type where Mexican-Americans and Negroes are relatively unsegregated from each other are middle-sized or smaller communities. Almost all of them—6 of the 9—fall into one type—HLH—in which segregation of both minorities from Anglos is above average, while their segregation from each

other is below average.

The large number of cities where Mexican-Americans are more segregated from Negroes than they are from Anglos present much greater diversity. This group includes not only all of the very large communities in our study but smaller cities as well. Most of the larger cities are of type HHH, in which all three types of segregation are above average. Nine cities are in this category. However, an almost equally large number, 7, are in LLL type. This order of segregation scores tends to prevail irrespective of the levels of segregation.

Table 5

Classification of Cities by Level and Order of Segregation

Level of Segregation*			Order of Segregation	
Negro vs. Anglo	Spanish-surname vs. Negro	Spanish-surname vs. Anglo	Spanish-surname more segregated from Negroes than from Anglos	Spanish-surname more segregated from Anglos than from Negroes
H	H	H	Dallas, Ft. Worth, Denver Houston, Los Angeles, Lubbock, Phoenix, San Antonio, Tucson	None
H	H	L	Albuquerque, Bakersfield, Port Arthur	None
H	L	L	Fresno, San Diego	Ontario
H	L	H	None	Abilene, Corpus Christi, Odessa, Riverside, San Bernardino, Wichita Falls
L	H	L	El Paso, San Francisco	None
L	H	H	Austin, San Angelo, Waco	None
L	L	H	None	None
L	L	L	Colorado Springs, Galveston, Laredo, Oakland, Pueblo, Sacramento, San Jose	Santa Barbara, Stockton

*The designations H and L in columns 1, 2, and 3 indicate whether the level of segregation is above (H) or below (L) the mean.

Little is known about the general images of these cities held by members of the minority groups. It is clear that certain cities are known as particularly "bad" for Mexican-Americans or Negroes, and other cities are known as relatively "good." There seems to be a general though not perfect relationship between the minority image of the city and the pattern of segregation present in the city. Exploratory interviews suggest that many highly segregated cities tend o have a bad reputation among minority group members for many other reasons in addition to residential segregation. The HLH cities also seem to have a bad reputation. These are he towns where the minorities are more or less in the same boat, and remote from the dominnt Anglos. Several such communities have a recent history of inter-minority conflict. It may well be that the ecological situation indicated in this pattern represents a distinct factor in the eneration of inter-minority tensions. However, the task of relating our subtypes of cities moe systematically to their reputations among various minorities and to the prevalence or absence of conflict must be left to future research.

In this chapter, we have presented an overview of residential segregation in the Southwest. We have discussed the segregation of several ethnically distinctive populations, focusing on the three major subpopulations—Anglo white, Mexican-American, and Negro. In sum, segregation of these populations from each other is not random but follows general patterns throughout the region, with special variants. We have attempted to formulate a typology of cities in which the major variations in segregation patterns are embodied. Finally, we have suggested that the overall life of minorities reflects and is reflected in the particular pattern of segregation in each city, and that this special quality finds expression in each city's reputation among the minority.

Notes to Chapter III

1. This index was developed by the Duncans and utilized in Otis Dudley Duncan and Beverly Duncan, "Residential Distribution and Occupational Stratification," American Journal of Sociology, LX (March, 1955), 493-503. It was also used in the two recent large-scale works on residential segregation cited earlier. See Taeuber and Taeuber, op. cit., and Lieberson, op. cit. Irrespective of the merits of alternative measures of segregation (see Taeuber and Taeuber, op. cit., pp. 195-245), the availability of these two major empirical studies dictated the use of D.

2. Harry T. Getty, "Interethnic Relationships in the Community of Tucson," University of Arizona, unpublished Ph.D. dissertation, 1950, Department of Anthropology.

3. Discussion with the late Rose Hum Lee, a Phoenix sociologist of Chinese descent, sketched the occasionally hostile relationships between the two ethnic groups.

IV. CORRELATES OF RESIDENTIAL SEGREGATION

The indexes which were developed and analyzed in the previous chapter merely measure the extent of residential segregation. Even when they are arrayed to detect segregation patterns and to establish types of cities grouped by the level and order of segregation of various populations, the indexes remain silent on the causes of segregation — or, in the comparative context of this study, the causes of different degrees of segregation. Differences in levels of segregation between cities or in its severity for the two minority groups examined here may be determined by a great variety of factors, such as housing market and other forms of discrimination, income differentials, the size and growth of cities, and the size and growth of minority groups — to mention a few. Even the most casual observer of the urban scene is aware of the complexities involved in any explanatory analysis.

Our effort in this chapter is both more modest and more ambitious than these remarks suggest. It is more modest in the sense that the "state of the arts" does not permit the analyst to produce a clearcut, neat explanation in terms of cause and effect. Instead, we must be content with sorting out and weighing the factors which seem to be associated with residential segregation of each minority from the dominant group and of each minority from the other. Although these forms of segregation are closely intertwined in particular cities, the analysis must separate them and examine the correlates of each form of segregation as if it were distinct from all others.

Our effort is more ambitious in the sense that it begins with a rather comprehensive listing and systematic classification of the factors associated with residential segregation, proceeds to an exploratory analysis of their importance, and culminates in the selection of those which appear to be the best indicators of the social realities of segregation.

The analysis addresses itself to the three major forms of segregation: segregation of persons of Spanish surname from Anglos, segregation of Negroes from white Anglos, and segregation of persons of Spanish surname from Negroes. (Other forms of segregation were analyzed in preliminary work but provided no useful clues to associated factors.) The previous chapter has already established the following rank order: the least segregation occurs between Mexican-Americans and Anglos, a larger degree of segregation appears between Mexican-Americans and Negroes, and the greatest segregation is that between Negroes and Anglos.

The analysis is concerned with three problems. First, it should account as fully as possible for each of the types of segregation, that is, it aims at isolating those factors which are most

highly associated with each form of segregation and which together and individually contribute significantly to an "explanation" of the variations in segregation of each type.

Next, we must understand why we are able to "explain" one form of segregation more fully than another. One could argue a priori that the greatest degree of segregation — that of Anglos from Negroes — would be the easiest to account for. But the opposite argument could be made equally well.

Third, the analysis would indicate which of the types of hypothesized factors is most important to each of the three types of segregation. It could be argued that the relatively conscious cultural factors (see below) are most highly correlated with the most stringent type of segregation. On the other hand, it is possible that the more impersonal economic factors are more highly associated with this "tough" kind of segregation. Here again, the a priori argument could go either way. Great social distance could be most related to cultural factors or to totally impersonal factors. Previous research and theory offer support on either side.

The following major types of factors have been found to be significantly associated with residential segregation or are examined in theoretical literature. These factors are cultural, economic, and demographic-ecological.

The relatively conscious cultural factors include:

(a) the acceptability of the subpopulation to the dominant population (or the "taste for discrimination"[1] against a subpopulation)

(b) the cohesiveness of the subpopulation and its desire for assimilation (or the "taste for segregation" of the subpopulation itself). Although this concept is not elaborated in the literature, it would include such matters as the degree of acculturation of the subpopulation and the extent of traditionalistic values among its members. It is clearly associated with the "taste for discrimination," though analytically distinct.

The impersonal economic factors include:

(a) the economic position of the subpopulation compared with the dominant population (its relative ability to compete for urban space)

(b) the condition of the housing market (supply of housing).

The still more impersonal demographic and ecological factors which set limits for the expression of cultural preferences and market operations include:

(a) the size and density of the population and other physical characteristics of the community which may facilitate segregation

(b) the size, composition, and growth rates of the minority subpopulations and their concentration in central cities.

Exploratory Analysis

Our first analytic steps were purely exploratory. It was necessary to explore which particular expression of a hypothesized variable would be most fruitful. For example, we were convinced that some income factor would be importantly related to segregation. But we could not tell whether the median income of the Spanish-surname population or the ratio of their median income to that of the total population would be more relevant to their segregation. Only exploratory testing of the relative "explanatory" power of one as compared with the other expression could answer such questions.

In addition, this stage of research included a preliminary testing of hypotheses derived from earlier theory and research. We wanted to select from among our variables those which were relatively highly associated with all forms of segregation. And we wanted to abandon further research on factors which were but slightly associated with any of the three forms of segregation. In other words, we wanted to discover variables that warranted more systematic research, and factors that should be dropped from further analysis. (Detailed results of our exploratory analyses are presented in technical form in Appendix C, including a list of the variables used and a discussion of techniques of analysis.)

The exploratory research indicated that relatively few variables accounted for most of the observed variations in each type of segregation. Also, these variables tended to be similar regardless of the type of segregation. Perhaps as interesting as these positive findings were some of the negative results—hypothesized factors which in fact showed no significant relationship to segregation of any type. Here is a brief summary of these preliminary findings.

The cultural factors: (a) taste for discrimination.—This variable proved one of the most difficult to express in empirical data. Our most ambitious indicator was a measure of the extent to which each minority's income in each city departs from the estimate of income based on educational attainment. We interpreted this as a rough indicator of local labor-market discrimination and expected it to be related to other kinds of discrimination. Ordinarily, residential seg-

regation is associated with other forms of general discrimination in the dominant society. It is linked with educational deficiencies in de facto segregated school systems and with inadequate public facilities. However, it was found that this measure of "taste for discrimination" did not relate significantly to any type of segregation. The low correlation of segregation with variations in labor-market discrimination was surprising. This negative finding may indicate a greater variety in a community's taste for discrimination than is generally assumed. It is also possible that the tastes for discrimination in the labor and housing markets are poorly correlated with each other. Further, our statistical proxy may be inadequate. (This last caveat, which can be applied to all subsequent discussion, is a common hazard of this kind of analysis.)

The cultural factors: (b) taste for segregation. — There is a pervasive controversy in literature about Mexican-Americans as to whether their separation from various aspects of American life is the result of their exclusion or of their desire to be excluded. The interpretation of indicators of acculturation is thus perhaps even more equivocal in the case of Mexican-Americans than in the case of most other minority groups. Here we rather arbitrarily label these variables as indicators of the "taste for segregation," though clearly any indicator of acculturation is also an indicator of the relative distinctiveness of the group and hence of the relative possibility for further discrimination against them.

For the exploratory analysis the percentage of foreign-born among the Spanish-surname population was selected as a measure of Mexican-American acculturation. However, this variable failed to show a significant relationship to segregation of Mexican-Americans from either Anglos or Negroes. The negative finding is probably explained by the unusual generational admixture of Mexican-Americans in the Southwest, which was discussed in Chapter III. Descendants of 16th Century settlers are surely "natives of natives" — in fact, more native than Anglos as a group. But this does not mean that they are fully acculturated in terms of the dominant society. Many descendants of the early Mexican pioneers in New Mexico and Colorado have long remained isolated in their mountain villages and have only recently entered the modern American scene. On the other hand, some recent immigrants from Mexico have moved directly into Texas border towns where Mexican-Americans are not segregated and dominate the life of the city. Thus, the presence of foreign-born Mexican-Americans may have a different symbolic meaning in different parts of the Southwest, and the percentage of foreign-born may be a considerably less adequate indicator of lack of acculturation than for other ethnic groups.

However, another cultural factor — a measure of traditionalism or familism (households with

five or more persons) — shows significance in the segregation of each minority from the Anglos, though not in the segregation of Mexican-Americans from Negroes. Although this variable was included as a "cultural" factor, it turned out to be highly correlated with income; both income and household size were significantly related to segregation.

The economic factors: (a) competitive position of the minorities. — Income was found to be importantly related to segregation of the two minorities from the Anglos. The ratio of the income of the total population to the minority income was more relevant than the median minority income as such. In other words, minority segregation is related to its comparative rather than absolute economic position. This is not very surprising, but raises the further question of what determines the income ratio — discrimination in the labor market, educational attainment, or other factors. This question will be pursued in another part of the over-all study, possibly through a multi-equation model in which one outcome would be residential segregation.

When we turn to the segregation of Mexican-Americans from Negroes, a different kind of income factor is important. We found that the higher the proportion of Mexican-Americans earning an income close to the Mexican-American median income, the higher the probability that Mexican-Americans would be segregated from Negroes. As Mexican-American income is dispersed over a wider range, Negroes and Mexican-Americans are less segregated from each other. This finding is difficult to interpret. High segregation of Mexican-Americans from Negroes may represent a survival of older, traditional Mexican-American living patterns. These may be cities in which Mexican-Americans remain clustered together — residentially as well as in income — in traditional isolation from most aspects of the larger system. As Mexican-Americans move into the larger system, we suggest, their incomes become dispersed over a wider range as they begin to hold more diversified jobs. Another aspect of this movement may be departure from traditional enclaves into more generalized urban working-class areas — which in many cities have large proportions of Negroes. It is notable that it is Mexican-American rather than Negro income differentiation that was significantly related to segregation of the two groups.

The economic factors: (b) condition of the housing market. — The preliminary analysis indicated that vacancies in housing were not importantly related to any of the various types of segregation. Here we were attempting a direct test of the significance of housing market conditions. This negative outcome seems to conflict with Taeuber's findings. He examined changes in the Negro pattern of residential segregation between 1950 and 1960 and their relationship to

the rates of new housing construction and of suburbanization. He was led to conclude that "improved economic circumstances among Negroes can, in a permissive housing market, be effective in reducing levels of residential segregation."[2]

The discrepancy may be more apparent than real. Our analysis is cross-sectional (comparative at one point in time), while Taeuber's work is concerned with change. Our analysis emphasizes economic or market conditions, while Taeuber emphasizes ecological processes. Of course, the two are related but we believe that Taeuber stresses a particular kind of presumed vacancy—that is, older housing in the central city. Our direct measure does not differentiate between kinds of vacancies. Finally, there is again the problem of statistical proxies for our variables. The vacancy rate may not be a completely satisfactory indicator of "housing market permissiveness," but then, neither are Taeuber's variables.

Demographic and ecological factors: (a) size and density of the total population. — We found that the larger the size of the total city population the higher the segregation of all three types. Also, the number of Mexican-Americans in a city was significantly related to segregation, and this variable was closely intercorrelated with the size of the total population.

Density of settlement, a promising variable derived from Wirth's classic discussion of the components of urbanism,[3] proved only slightly related to variations in segregation. This outcome cannot be fully explained by the fact that most of the cities considered here have relatively low density. There is a considerable range from a low in Galveston of 798 persons per square mile to a high in San Francisco of 16,599 per square mile.

Demographic and ecological factors: (b) characteristics of the minorities. — We anticipated that the extent of relative concentration of either minority group in the central city would be importantly related to their segregation. (See Chapter II for a discussion of differences between Negro and Mexican-American patterns of urbanization.) This factor proved to be of little significance, however, in "explaining" variations in segregation, again contrary to Taeuber's findings mentioned above.

In contrast, a set of demographic variables related to the composition of the minority population did prove useful. In general, we found that the larger the proportion of nonwhites in the total minority, the greater the segregation of both minorities. This is true of segregation both

from the Anglos and from the other minority. Conversely, the greater the proportion of Mexican-Americans, the less segregated was each minority from the Anglos and from the other minority.

Another group of related demographic variables appears in both equations where Mexican-Americans were concerned, although they are statistically significant in only one equation. The rate of increase of the Spanish-surname population was found to be negatively related to segregation. In short, the greater the relative increase in the Spanish-surname population, the lower the segregation of this population from both Anglos and Negroes. This finding may reflect the California-directed movement of the Mexican-American population. As was already noted, the segregation of this minority in California tends to be somewhat lower than in Texas. This variable may thus reflect the regional redistribution of the Spanish-surname population as much as it reflects the effects of actual population increase.

Final Analysis

In sum, the exploratory work yielded both positive and negative findings. Some of the negative findings could possibly be attributed to the fact that our variables were really poor indicators of the social realities. Nonetheless, there emerged a cluster of factors that clearly warrant further analysis. To repeat an earlier statement, this analysis should account for each of the types of segregation; it should indicate why one level of explanation (correlation coefficient) is higher than another; and it should enable us to see which of the hypothesized factors are most important to each of the types of segregation.

The technique used for this kind of investigation was multiple regression analysis. Four "independent" (or predictor) variables were correlated with each type of segregation. As the first step, we selected the most general expressions of the variables that had shown significance in our exploratory work. These include:

1. One cultural factor: the percentage of minority households with five or more persons, nonwhite or Spanish surname, as indicator of traditional familism.*

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*As indicated earlier, this factor was highly intercorrelated with income and is thus far from satisfactory. We made a considerable effort to find new variables which would be less contaminated with economic factors and which would still express the traditionalistic familistic component we were seeking. But such variables, e.g. differentials in fertility ratios, did not contribute significantly to the correlation coefficients. The "contaminated" variables did. Therefore, we concluded that household size may reflect an important interaction between traditionalism and the economic status of the minority. When a population is already differentiated in income, large households strengthen the differentiation, and vice-versa.

II. One economic factor: the relative income position of the minority populations. For the equation relating to segregation of the Spanish-surname group from Anglos, the ratio of total median income to Spanish-surnames median income was used. For the equation relating to Negro segregation from Anglos, the ratio of total median income to nonwhite was applied. For the segregation of Spanish-surname persons from Negroes, the equation includes the percentage of nonwhite to Spanish-surname median income. The substitution of nonwhite for Negro income is dictated by data restraints.

III. Two demographic factors: (a) size of city in terms of total population, and (b) composition of the minority, expressed as the ratio of Spanish-surname persons to nonwhites in each city.

The results of the analysis are shown in Table 6. On the whole, they are moderately successful in meeting the first purpose of the equations; they do account for a substantial part of inter-urban differences in the three types of segregation, as shown in the last row of the table. The independent variables account most adequately for the segregation of Mexican-Americans from Anglos, with a coefficient of determination (R^2) of .67. They are least successful in "explaining" the segregation of Spanish-surname persons from Negroes, with a coefficient of determination of only .36. The coefficients of deterimation in all three equations are notably lower than the corresponding figures from the exploratory analysis (see Appendix C), but this disadvantage is compensated by the fact that we can compare the equations exactly, and thus approach the other purposes of the analysis.

The second objective is to interpret differences in the magnitudes of these coefficients. As suggested earlier, the three subpopulations are not only more or less segregated from each other in location, but are also probably more or less socially distant from each other. The type of segregation that is most adequately "explained," that of Mexican-Americans from Anglos, is also the least stringent. The most rigorous level of segregation, that of Negroes from Anglos, is less adequately accounted for in our analysis. This is not unexpected, though it could not have been predicted with confidence. Other research indicates that the Mexican-American minority has been experiencing substantial internal changes since World War II. Its residential distribution in a city might therefore be more responsive to situational variables than that of Negroes' which is deeply intertwined with the more static low status of the Negro in American society.

The least adequate "explanation" is that of the inter-minority segregation of Mexican-Americans

ble 6

Coefficients of Determination, Partial Correlations, T-values, Regression Coefficients, and Intercept Values for Variables to Explain Residential Segregation

Independent Variables	Dependent Variables: Spanish-surname vs. Anglo			Spanish-surname vs. Negro			Negro vs. Anglo		
	b	T-value	Partial correlation	b	T-value	Partial correlation	b	T-value	Partial correlation
Cultural									
% WPSS[1] O.H.U.[2] with 5 persons or more . . .	0.95	3.7***	6	0.81	2.6**	0.42	—	—	—
% nonwhite O.H.U.[2] with 5 persons or more . . .	—	—		—	—	—	0.57	2.0*	0.34
Economic									
Ratio of total median to WPSS[1] median income	17.61	1.7*	9	—	—	—	—	—	—
Percentage of nonwhite to WPSS[1] median income	—	—		-0.30	-1.6	-0.28	—	—	—
Ratio of total median to nonwhite median income	—	—		—	—	—	20.03	3.4***	0.53
Demographic									
(a) Total city population	.00001	2.4**	)	.00002	3.4***	0.53	.00001	2.1**	0.35
(b) Ratio of WPSS[1] to nonwhites	-0.08	-2.4**	)	-0.07	-1.2	-0.21	-0.09	-2.5**	-0.42
Intercept		-9.2			45.3			32.19	
Multiple R^2		.67			.36			.46	

*** Significant at 0.01 level
** Significant at 0.05 level
* Significant at 0.10 level
[1] WPSS — White Persons of Spanish surname
[2] O.H.U. — Occupied housing units

from Negroes. Our analysis of this form of segregation is rather novel; little is known about the separation of minorities from each other. Sociologists have developed a descriptive literature on the succession phenomenon—that is, on the tendency in Eastern and Midwestern cities for groups to follow one another in the poorer, central-city ghettoes. The Lower East Side of Manhattan and the Halstead Street area in Chicago, for example, have seen one wave of immigrants after another living in the same tenements and occupying the same stores—until the current urban renewal. Puerto Ricans settled on the fringe of Negro-occupied Harlem in New York, often succeeding Negroes. Such processes, analyzed in detail for the case of Negroes in Chicago,[4] may be quite different in the Southwest. Many cities actually grew up around originally Mexican nuclei—Anglos "succeeding" Mexicans at the outset. As indicated in Chapter II, more recent arrivals among Mexican-Americans did not always immigrate to the central-city ghettoes. They rather tended to drift to old Mexican-American neighborhoods which were often on the fringes of cities. Boyle Heights in Los Angeles, however, is an illustration of an area where Mexican-Americans succeeded other ethnic groups. Negroes, relatively new in the Southwest and attracted by industrial opportunities, often settled in areas quite remote from long-established Mexican-American enclaves.

Though Negroes and Mexican-Americans are both predominantly poor and are thus in a comparable market position in respect to housing, there is little reason to believe that there is any strong influence—from real estate brokers or others—to lump them as similar groups who "ought" to live together. Discriminatory practices are documented against both groups. For example, as recently as 1955 a real estate board in Los Angeles County expelled members for selling to Mexican-Americans.[5] And separation of the minorities from each other has been documented in the case of public housing,[6] but even then informants are frequently unclear whether such segregation is imposed or reflects preferences of tenants.

The third purpose of the analysis is to determine the "explanatory" power of the independent variables for different kinds of segregation.

The cultural factor (large households indicating traditional familism) produces significant positive regression coefficients in all equations. This factor (which, as pointed out before, is associated with income) is most highly correlated with the segregation of Mexican-Americans from Anglos and least correlated with Negro segregation from Anglos. From Table 6 the columns

showing "partial correlations"), we see that, holding other factors constant, familism with its diffuse social and economic attendants is more related to Mexican-American segregation from Anglos and less related to Negro segregation from Anglos than any other factor. To say the same thing in another way: when large proportions of Mexican-Americans begin to have small families, they tend to become residentially integrated with Anglos, and this is far less true for Negroes.

The different importance of large families in the segregation of the two minority groups from Anglos probably reflects the greater capacity of Mexican-Americans to become assimilated. A decrease in extended-family household practices and the beginning of birth control indicate the emergence of a relatively acculturated and more integrable Mexican-American population. This is less clear-cut as an indicator of acculturation among non-Catholic Negroes. It is likely, further, that the path from acculturation to integration is strewn with more obstacles for Negroes than for Mexican-Americans.

It is also interesting to note that the size of the family is the second most important factor in accounting for inter-minority segregation. This suggests that the less the Mexican-Americans are acculturated, the more likely they are to share the segregated areas with Negroes. Further, it is the size of the Mexican-American household, not the size of the Negro household, that is correlated with the segregation of Mexican-Americans from Negroes.

The economic factor (ratio of each minority to total median income) is very significantly related to the segregation of Negroes from the Anglos but only marginally significant for segregation of Mexican-Americans from Anglos: the greater the disparity in income between the minorities and the Anglos, the higher the segregation between them. The income differential is the single most important factor in accounting for the most stringent form of segregation — that of Negroes from Anglos. In the less rigorous segregation of Mexican-Americans from Anglos, the economic factor is the least important. The income ratio is not significantly associated with segregation of Negroes from Mexican-Americans. This finding may reflect the fact that median income differentials for the two minority groups are usually quite small.

As for the demographic factors, the size of the city is significant in all three equations, that is, the larger the city the greater the segregation of all three types. It is the most significant variable "explaining" Mexican-American segregation from Negroes.

Paradoxically, the impersonality and anonymity of the larger city may favor social integration of individual members of minorities. Indeed, visitors to the larger cities of the Southwest are often shown racially or ethnically "integrated" middle-class neighborhoods. But the larger cities also have many more individuals in a minority. Ecological processes can work more freely to sort out various kinds of individuals. The poor can be separated from the less poor. The Mexican-American poor can be separated from the Negro poor. In turn, the segregation of minority individuals into areas with a distinctive social identity (San Francisco's Mission and Los Angeles' Watts) makes the minorities' image even clearer to the dominant group, and it probably facilitates further discrimination against them. This kind of "snowball effect" in which ecological processes reinforce cultural and psychological processes may generally affect Mexican-Americans more than it does Negroes, since Mexican-Americans are less rigidly confined to a caste status. The factor is most significant in the case of Mexican-American segregation from Anglos. Negative attitudes of the dominant Anglos may reflect a local association of Mexican-Americans with certain areas of the city known for juvenile delinquency, cheap stores, and generally slummy appearance. Negative attitudes about Negroes, on the other hand, are likely to persist across communities independently of the Negroes' relative socio-economic status and the particular environment in which the dominant population views the minority. Given the interaction of all these factors in the larger cities, segregation of all groups from each other tends to be high.

The second demographic variable, that of the composition of the minority, is significant in both equations dealing with the segregation of minorities from the Anglo population. That is, wherever there are relatively few Mexican-Americans in comparison to Negroes, this situation seems to accentuate the segregation of either group from Anglos. The Mexican-Americans may suffer from being classified with the Negro minority. The greater "taste for discrimination" against Negroes may become diffused to encompass Mexican-Americans. Conversely, Negroes may benefit from being associated with Mexican-Americans who become defined as "our minority" (as one respondent put it) in cities where they predominate. The generally lower taste for discrimination against Mexican-Americans may become somewhat diffused to include Negroes. Each minority affects the other's chances for movement in the system.

Highlights of Results

In summary, our conclusions stripped of detail and qualifications are as follows:

All three forms of residential segregation in the urban Southwest — Mexican-Americans versus

Anglos, Negroes versus Anglos, and Mexican-Americans versus Negroes—are significantly associated with the size of the city. The larger the city, the greater the degree of segregation.

Likewise, all three forms of segregation are related to the presence of larger households in the minority populations, which can be considered an index of acculturation. This relationship is even stronger for Mexican-Americans than for Negroes. Mexican-Americans' potential for residential integration may be more closely related to their general acculturation.

As one suspects, the residential segregation of the two minorities from Anglos is associated with their relatively low economic position. However, the segregation of Mexican-Americans from Negroes is not significantly related to income differentials between the two minorities. On the average, such differentials are relatively small.

The segregation of both minorities from Anglos is a function of the relative size of the Mexican-American and the Negro populations in a city. When there are few Mexican-Americans compared to nonwhites, segregation from the dominant group tends to be more severe. When there are relatively few nonwhites compared to Mexican-Americans, segregation tends to be less pronounced. However, the relative size of the two minority populations is not significantly related to the segregation of Mexican-Americans and nonwhites from each other.

While discrimination in housing markets and elsewhere is a social reality, especially for Negroes, our multiple regression analysis failed to isolate the importance of this factor. This failure is probably explainable on several grounds. First, we had great difficulty in finding an adequate statistical expression for differences in the relative "taste for discrimination" on the part of Anglos against the two minorities. Second, we have no indicator at all of the taste of each minority for segregation from the other. More importantly, perhaps, we have very little idea of how a local social climate of prejudice and discrimination against minorities actually operates to generate tensions between two minorities. The largest unexplained variances occurred for Spanish-surname vs. Negro segregation and Negro vs. Anglo segregation, and it is precisely to these two types of segregation that the effects of this local climate may be most relevant.

In addition to its positive and negative findings, the analysis has served to open up new areas for research and call attention to the potentials of studying residential segregation in settings where two or more large, identifiable and distinctive minorities are involved. It is character-

istic that we have found the selection of variables functionally related to segregation and the interpretation of our results to be least difficult where research literature or our own field experience was greatest. The selection of factors and the interpretation of relationships between them was most difficult where systematic literature was lacking or our field knowledge of the issues limited, as in the case of segregation of Mexican-Americans from Negroes.

Notes to Chapter IV

1. See Gary Becker, The Economics of Discrimination (Chicago: The University of Chicago Press, 1957), p. 137, for a discussion of this concept.
2. Karl E. Taeuber, "Residential Segregation," Scientific American, CCXIII (August, 1965) p. 19.
3. "Urbanism as a Way of Life," reprinted in Reiss, Jr., ed., op. cit., pp. 60-83.
4. Otis Dudley Duncan and Beverly Duncan, The Negro Population of Chicago (Chicago: University of Chicago Press, 1957).
5. Davis McEntire, Residence and Race (Berkeley and Los Angeles: University of California Press, 1960), pp. 241-242.
6. See statement of Roy B. Yanez, Executive Director, Housing Authority of the City of Phoenix, Hearings Before the United States Commission on Civil Rights, Phoenix, Arizona, February 3, 1962 (Washington: United States Government Printing Office, 1962), pp. 34-43.

V. SUMMARY

This study was undertaken because understanding of the residential segregation of Mexican-Americans in the urban Southwest is one of the important building blocks toward an understanding of this minority's over-all social and economic position. Mexican-Americans are differentiated from the larger society in many respects, such as income, occupations, educational attainment, political participation and power, culture and language. The various kinds of differentiation are in all probability highly interrelated. Differentiation in terms of urban residence location reflects not only physical distance from the majority population but the more pervasive social distance as well.

Besides, the study of the residential segregation of Mexican-Americans affords additional insights into one of the most enduring characteristics of American cities, the concentration of ethnic or racial minorities in ghettoes. First considered a threat to American values, the ethnic ghetto came later to be viewed as an adaptive and transitional device that would help immigrant groups in the "inevitable" assimilation to American society. This optimistic view was punctured as Negro ghettoes developed or expanded in Northern and Mid-western and finally in Western cities and appeared to become permanent fixtures of the urban scene.

Segregation patterns in the urban Southwest are of special significance because this region includes two large population groups generally recognized as disadvantaged minorities: Mexican-Americans and Negroes. There are also significant numbers of Orientals and Indians in many cities. This constellation makes it possible to examine not only the residential separation of each minority from the members of the dominant society but also the segregation of the two subordinate groups from each other.

While all of the three principal population segments considered in this study — white Anglos, Mexican-Americans, and Negroes — are now about equally urbanized, with roughly four-fifths of each living in cities, their patterns of urbanization have varied a great deal. A large percentage of Mexican-Americans continue to reside in the outlying portions of metropolitan areas. Negroes are highly concentrated in central city districts. Anglos have become increasingly suburban. The different urbanization patterns of Mexican-Americans and Negroes reflect in part the origin of the ghettoes now occupied by each minority. Many of today's barrios once were labor camps or agricultural settlements and became only later engulfed in urban expansion. Hence, they are today still outside the central cities. The Negro ghetto is typically in the core of urban areas —

and so are, of course, some of the Mexican-American neighborhoods.

Analysis of residential segregation in 35 Southwest cities yields one clear-cut finding. Mexican-Americans are substantially less segregated from the dominant group than are Negroes, without exception, but the level of segregation for both groups has remained high. The results show the following general rank order: the most severe segregation exists between Negroes and white Anglos; The next highest degree of segregation is observed between Mexican-Americans and Negroes; and the lowest of the three types of segregation applies to Mexican-Americans versus Anglos. Within the Mexican-American group there is also some segregation between native born and foreign born.

However, the degree of segregation varies greatly from city to city as well as between the three population groups in each city. It seems difficult at first to detect any order in the chaos of the "indexes of dissimilarity" which are used to measure residential segregation. Cities can, however, be classified by patterns of segregation affecting the minority groups. There are basically two types of cities. In most cities, segregation of Negroes from Anglos is the highest; segregation of Mexican-Americans from Negroes is next highest, and segregation of Mexican-Americans from Anglos is lowest. But in some cities a different pattern emerges in which the order of the last two types of segregation is reversed. There seems to be some indication that varying degrees of segregation might have different over-all concomitants in cities of the two types.

Common observation tells us that residential segregation may be determined by a great variety of factors including but not limited to discrimination in housing markets. The scholarly literature on the subject offers a number of hypotheses on this point; the unusual admixture of minority groups in Southwest cities provides an opportunity to test the general validity of existing "explanations" and to develop new insights as well. But the scientific tools available for this kind of analysis are still so imperfect that the results show "correlates" of residential segregation rather than truly causal explanations.

Some of the factors suggested by previous research have been confirmed as being significantly related to residential segregation. Others have not. Among those which proved to be relatively unimportant as "explanatory" variables were the absolute income of the minority group, vacancies in the supply of housing, the population density of the city, and the concentration of the minority in the central city as contrasted with outlying areas. We found the following factors

important in accounting for segregation:

The larger the city, the greater the intensity of segregation in all of its three principal types: Mexican-Americans versus white Anglos, Negroes versus white Anglos, and Mexican-Americans versus Negroes.

The greater the proportion of large households in the two minorities, the more severe is the residential separation of all three types. The proportion of large households among minorities, in turn, can be interpreted as an indicator of their acculturation.

While residential segregation does not seem to be systematically related to low minority incomes as such, it is associated with income differentials between the two minorities and the white Anglos. However, the income factor does little if anything to "explain" the segregation between Mexican-Americans and Negroes.

The intensity of residential segregation is also a function of the ethnic composition of the total minority population. The separation of either minority from the dominant group is more pronounced in cities with a large nonwhite population relative to their Mexican-American population, and vice versa. And these numerical relationships do not seem to influence in any significant measure the segregation of the two minorities from each other.

The strength of the relationships differs from case to case, as it always does in correlation analysis. Some of the factors enumerated above are more clearly associated with the severe forms of residential segregation than others. And there are remaining variances of different magnitudes that are left "unexplained" by the factors isolated. Several factors that were intuitively believed to be of importance failed to show significant statistical relationships to segregation. Perhaps the most important among these is discrimination of various kinds.

Of course, the conceptual scheme underlying this analysis included what has come to be called the "taste for discrimination." But it turned out to be extremely difficult to find a statistical proxy for discrimination — as one must in multiple regression analysis. The statistical measure selected for this purpose failed to show any significant relationships to both inter-city and inter-group segregation. This outcome does not negate or diminish the significance of discrimination. It merely demonstrates the problem of expressing some facts of life in such form that they lend themselves to quantitative analysis.

Under these circumstances, one must conclude that some of the influence of discrimination on the varying extent of residential segregation is buried in the variance left unaccounted for by the analysis. But we know that, once established, the ghetto becomes a "way of life" affecting all perceptions of the larger system. It becomes a way of life in that it provides defenses, to be sure, but there is little doubt that it is highly meaningful and valuable to many of its residents. Though we have been equally handicapped in coping with this kind of factor in our analysis, there is little doubt that it persists. Despite such questions of value, which are particularly salient in the study of Mexican-Americans, the American society is committed to an over-all ideal of full participation and freedom of choice for all of its members. As long as there is any suspicion that freedom of choice is being abrogated and that full participation is being denied, the problem of residential segregation must be of concern to us all.

APPENDIX A

Supplemental Tables Showing Distribution of the Population of the Five Southwestern States by Ethnic Group, by Metropolitan Residence, Inside and Outside Central Cities: 1950 and 1960

APPENDIX TABLE A-1

Distribution of the Population of Arizona by Ethnic Group, by Metropolitan Residence, Inside and Outside Central Cities: 1950 and 1960

	Total	White	Anglo	WPSS	Nonwhite	Negro
Numbers						
1960						
A. Total population of state	1,302,161	1,169,517	975,161	194,356	132,644	43,403
B. Population in metropolitan areas	929,170	876,133	752,656	123,477	53,037	32,953
C. Population in central cities	652,062	617,133	541,170	75,963	34,929	27,949
D. Population of SMSA outside central cities	277,108	259,000	211,486	47,514	18,108	5,006
E. Population in urban areas	970,616	922,599	777,061	145,538	48,017	35,189
F. Population in area of central city annexed in 1950-1960	499,510					
1950						
A. Total population	749,587	654,511	526,193	128,318	95,076	25,974
B. Population in metropolitan areas	472,986	439,851	370,067	69,784	33,135	19,426
C. Population in central cities	152,272	142,256	120,840	21,416	10,016	7,974
D. Population of SMSA outside central cities	320,714	297,595	249,227	48,368	23,119	11,452
E. Population in urban areas	416,000	394,403	315,680	78,723	21,597	16,471
Percentages						
1960						
Distribution of total by ethnic group	100.0	89.8	74.9	14.9	10.2	3.3
Distribution of metropolitan population	100.0	94.3	81.0	13.3	5.7	3.5
Distribution inside central cities	100.0	94.6	83.0	11.6	5.4	4.3
Distribution outside central cities	100.0	93.5	76.3	17.1	6.5	1.8
Percent of total in metropolitan area	71.4	74.9	77.2	63.5	40.0	75.9
Percent of population in metropolitan area in central cities	70.2	70.4	71.9	61.5	65.8	84.8
Percent of metropolitan population outside central city	29.8	29.6	28.1	38.5	34.1	15.2
Percent of total in urban areas	74.5	78.9	79.7	74.9	36.2	81.1
Percent of central city population annexed (F÷C)	76.6					
1950						
Distribution of total by ethnic group	100.0	87.3	70.2	17.1	12.7	3.5
Distribution of metropolitan population	100.0	93.0	78.2	14.8	7.0	4.1
Distribution inside central cities	100.0	93.4	79.4	14.1	6.6	5.2
Distribution outside central cities	100.0	92.8	77.7	15.1	7.2	3.6
Percent of total in metropolitan area	63.1	67.2	70.3	54.4	34.8	74.8
Percent of population in metropolitan area in central city	32.2	32.3	32.6	30.7	30.2	41.0
Percent of metropolitan population outside central city	67.8	67.7	67.3	69.3	69.8	59.0
Percent of total in urban areas	55.4	60.3	60.0	61.3	22.7	63.4

TABLE A-2

Distribution of the Population of California by Ethnic Group, by Metropolitan Residence, Inside and Outside Central Cities: 1950 and 1960

	Total	White	Anglo	WPSS	Nonwhite	Negro
Numbers						
1960						
A. Total population of state	15,717,204	14,455,230	13,028,692	1,426,538	1,261,974	883,861
B. Population in metropolitan areas	13,590,821	12,416,960	11,197,896	1,219,064	1,173,861	845,077
C. Population in central cities	5,458,871	4,666,577	4,175,101	491,476	792,294	590,950
D. Population of SMSA outside central cities	8,131,950	7,750,383	7,022,795	727,588	381,567	254,127
E. Population in urban areas	13,573,155	12,419,806	11,201,691	1,218,115	1,153,349	834,642
F. Population in area of central city annexed in 1950-1960	392,794					
1950						
A. Total population	10,586,223	9,915,173	9,154,720	760,453	671,050	462,172
B. Population in metropolitan areas	8,988,655	8,375,418	7,748,082	627,336	613,237	438,344
C. Population in central cities	4,323,209	3,913,810	3,633,911	279,899	409,399	301,583
D. Population of SMSA outside central cities	4,665,446	4,461,608	4,114,171	347,437	203,838	136,761
E. Population in urban areas	8,539,420	7,964,985	7,391,651	576,334	574,435	427,255
Percentages						
1960						
Distribution of total by ethnic group	100.0	92.0	83.9	9.1	8.0	5.6
Distribution of metropolitan population	100.0	91.4	82.4	9.0	8.6	6.2
Distribution inside central cities	100.0	85.5	76.5	9.0	14.5	10.8
Distribution outside central cities	100.0	95.3	86.4	8.9	4.7	3.1
Percent of total in metropolitan area	86.5	85.9	85.9	85.4	93.0	95.6
Percent of population in metropolitan area in central city	40.2	37.6	37.3	40.3	67.5	69.9
Percent of metropolitan population outside central city	59.8	62.4	62.7	59.7	32.5	30.1
Percent of total in urban areas	86.4	85.9	86.0	85.4	91.4	94.4
Percent of central city population annexed (F÷C)	7.2					
1950						
Distribution of total by ethnic group	100.0	93.7	86.5	7.2	6.3	4.4
Distribution of metropolitan population	100.0	93.2	86.2	7.0	6.8	4.9
Distribution inside central cities	100.0	90.5	84.1	6.5	9.5	7.0
Distribution outside central cities	100.0	95.6	88.2	7.4	4.4	5.4
Percent of total in metropolitan area	84.9	84.5	84.6	82.5	91.4	94.8
Percent of population in metropolitan area in central city	48.1	46.7	46.9	44.6	66.8	68.8
Percent of metropolitan population outside central city	51.9	53.3	53.1	55.4	33.2	31.2
Percent of total in urban areas	80.7	80.3	80.7	75.8	85.6	92.4

TABLE A-3

Distribution of the Population of Colorado by Ethnic Group, by Metropolitan Residence, Inside and Outside Central Cities: 1950 and 1960

Numbers	Total	White	Anglo	WPSS	Nonwhite	Negro
1960						
A. Total population of state	1,753,947	1,700,700	1,543,527	157,173	53,247	39,992
B. Population in metropolitan areas	1,191,832	1,144,020	1,052,154	91,866	47,812	38,864
C. Population in central cities	655,262	614,156	551,502	62,654	41,106	35,449
D. Population of SMSA outside central cities	536,570	529,864	500,652	29,212	6,706	3,415
E. Population in urban areas	1,292,790	1,246,787	1,138,762	108,025	46,003	37,466
F. Population in area of central city annexed in 1950-1960	85,122					
1950						
A. Total population	1,325,089	1,296,653	1,178,522	118,131	28,436	20,177
B. Population in metropolitan areas	781,231	757,764	709,819	47,945	23,467	18,990
C. Population in central cities	524,943	503,885	467,559	36,326	21,058	17,676
D. Population of SMSA outside central cities	256,288	253,879	242,260	11,619	2,409	1,314
E. Population in urban areas	831,318	807,853	749,149	58,704	23,465	19,196
Percentages						
1960						
Distribution of total by ethnic group	100.0	97.0	88.0	9.0	3.0	2.3
Distribution of metropolitan population	100.0	96.0	88.3	7.7	4.0	3.3
Distribution inside central cities	100.0	93.7	84.2	9.6	6.3	5.4
Distribution outside central cities	100.0	98.8	93.3	5.4	1.2	0.6
Percent of total in metropolitan area	68.0	67.3	68.2	58.4	89.8	97.2
Percent of population in metropolitan area in central city	55.0	53.7	52.4	68.2	86.0	91.2
Percent of metropolitan population outside central city	45.0	46.3	47.6	31.8	14.0	8.8
Percent of total in urban areas	73.7	73.3	73.8	68.7	86.4	93.7
Percent of central city population annexed (F÷C)	13.0					
1950						
Distribution of total by ethnic group	100.0	97.8	88.9	8.9	2.1	1.5
Distribution of metropolitan population	100.0	97.0	90.8	6.1	3.0	2.4
Distribution inside central cities	100.0	96.0	89.1	6.9	4.0	3.4
Distribution outside central cities	100.0	99.1	94.5	4.5	0.9	0.5
Percent of total in metropolitan area	59.0	58.4	60.2	40.6	82.5	94.1
Percent of population in metropolitan area in central city	67.2	66.5	65.9	75.8	89.7	93.1
Percent of metropolitan population outside central city	32.8	33.5	34.1	24.2	10.3	6.9
Percent of total in urban areas	62.7	62.3	63.6	49.7	82.5	95.1

TABLE A-4

Distribution of the Population of New Mexico by Ethnic Group, by Metropolitan Residence, Inside and Outside Central Cities: 1950 and 1960

Numbers	Total	White	Anglo	WPSS	Nonwhite	Negro
1960						
A. Total population of state	951,023	875,763	606,641	269,122	75,260	17,063
B. Population in metropolitan areas	262,199	253,448	185,347	68,101	8,751	4,738
C. Population in central cities	201,189	195,264	151,474	43,790	5,925	3,568
D. Population in SMSA outside central cities	61,010	58,184	33,873	24,311	2,826	1,170
E. Population in urban areas	626,479	601,383	446,616	155,222	24,641	14,338
F. Population in area of central city annexed in 1950-1960	23,646					
1950						
A. Total population	681,187	630,211	381,331	248,880	50,976	8,408
B. Population in metropolitan areas	145,673	141,512	97,783	43,729	4,161	1,606
C. Population in central cities	96,815	94,849	70,595	24,254	1,966	1,223
D. Population of SMSA outside central cities	48,858	46,663	27,188	19,475	2,195	383
E. Population in urban areas	341,889	330,034	228,095	101,939	11,855	6,565
Percentages						
1960						
Distribution of total by ethnic group	100.0	92.1	63.8	28.3	7.9	1.8
Distribution of metropolitan population	100.0	96.7	70.7	26.0	3.3	1.8
Distribution inside central cities	100.0	97.1	75.3	21.8	2.9	1.8
Distribution outside central cities	100.0	95.4	55.5	39.8	4.6	1.9
Percent of total in metropolitan area	27.6	28.9	30.6	25.3	11.6	27.8
Percent of population in metropolitan area in central city	76.7	77.0	81.7	64.3	67.7	75.3
Percent of metropolitan population outside central city	23.3	23.0	18.3	35.7	32.3	24.7
Percent of total in urban areas	65.9	68.7	73.6	57.7	32.7	84.0
Percent of central city population annexed (F÷C)	11.8					
1950						
Distribution of total by ethnic group	100.0	92.5	56.0	36.5	7.5	1.2
Distribution of metropolitan population	100.0	97.1	67.1	30.0	2.8	1.1
Distribution inside central cities	100.0	98.0	72.9	25.1	2.0	1.3
Distribution outside central cities	100.0	95.5	55.6	39.9	4.5	0.8
Percent of total in metropolitan area	21.4	22.5	25.6	17.6	8.2	19.1
Percent of population in metropolitan area in central city	66.5	67.0	72.2	55.5	47.2	76.2
Percent of metropolitan population outside central city	33.5	33.0	27.8	44.5	52.8	23.8
Percent of total in urban areas	50.2	52.4	59.8	41.0	23.3	78.1

TABLE A-5

Distribution of the Population of Texas by Ethnic Group, by Metropolitan Residence, Inside and Outside Central Cities: 1950 and 1960

Numbers	Total	White	Anglo	WPSS	Nonwhite	Negro
1960						
A. Total population of state	9,579,677	8,374,831	6,957,021	1,417,810	1,204,846	1,187,125
B. Population in metropolitan areas	5,926,385	5,192,881	4,328,575	864,306	733,504	720,207
C. Population in central cities	4,402,585	3,763,121	3,021,320	741,801	639,464	625,331
D. Population of SMSA outside central cities	1,523,800	1,429,760	1,307,255	122,505	94,040	94,876
E. Population in urban areas	7,187,470	6,282,381	5,168,331	1,114,050	905,089	890,875
F. Population in area of central city annexed in 1950-1960	1,163,277					
1950						
A. Total population	7,711,194	6,726,534	5,692,766	1,033,768	984,660	977,458
B. Population in metropolitan areas	3,968,945	3,494,237	2,922,274	571,963	474,708	469,276
C. Population in central cities	2,895,896	2,517,628	2,074,780	442,848	378,268	373,691
D. Population of SMSA outside central cities	1,073,049	976,609	847,494	129,115	96,440	95,585
E. Population in urban areas	4,838,060	4,221,593	3,517,481	704,112	616,468	612,324
Percentages						
1960						
Distribution of total by ethnic group	100.0	87.4	72.6	14.8	12.6	12.4
Distribution of metropolitan population	100.0	87.6	73.0	14.6	12.4	12.2
Distribution inside central cities	100.0	85.5	68.6	16.8	14.5	14.2
Distribution outside central cities	100.0	93.8	85.8	8.0	6.2	6.2
Percent of total in metropolitan area	61.9	62.0	62.2	61.0	60.9	60.7
Percent of population in mteropolitan area in central city	74.0	72.5	69.8	85.8	87.2	86.8
Percent of metropolitan population outside central city	25.7	27.5	30.2	14.2	12.8	13.2
Percent of total in urban areas	75.0	75.0	74.3	78.6	75.1	75.0
Percent of central city population annexed (F÷C)	26.4					
1950						
Distribution of total by ethnic group	100.0	87.2	73.8	13.4	12.7	12.7
Distribution of metropolitan population	100.0	88.0	73.6	14.4	12.0	11.8
Distribution inside central cities	100.0	86.9	71.6	15.3	13.1	12.9
Distribution outside central cities	100.0	91.0	79.0	12.0	9.0	8.9
Percent of total in metropolitan area	51.5	51.9	51.3	55.3	48.2	48.0
Percent of population in metropolitan area in central city	73.0	72.1	71.0	77.4	79.7	79.6
Percent of metropolitan population outside central city	27.0	27.9	29.0	22.6	20.3	20.4
Percent of total in urban areas	62.7	62.8	61.8	68.1	62.6	62.6

APPENDIX B

The Index of Residential Dissimilarity and Problems of its Use in this Study

The formula used for calculating the index of dissimilarity is as follows:

$$D_{jk} = 1/2 \sum_{i=1}^{n} \left| \left(\frac{N_{ij}}{T_j} - \frac{N_{ik}}{T_k} \right) \right|$$

where D_{jk} = The index of dissimilarity between ethnic groups j and k in a city:

n = total number of areas in a city

i = the particular subareas of a city which for purposes of this study are Census tracts

N_{ij} = number of people in area i of ethnic group j

N_{ik} = number of people in area of ethnic group k

T_j = total population in a city of ethnic group j

T_k = total population in a city of ethnic group k

The indexes were computed on the basis of Census tract data for the 35 cities. Unfortunately, no data on areas smaller than tracts were available for the Spanish-surname population, which for our purposes here was defined as the universe of Mexican-Americans. As a consequence, the data have several weaknesses, which are identified below and whose importance we have made some attempt to evaluate.

The first and most important weakness is the possibility that Census tract boundaries have been aligned so as to separate ethnic and/or racial groups. We found a rank-order correlation coefficient of .56 between D's for Negro vs. "other" computed on a block[1] and on a tract basis for 15 of our 35 cities. This suggests that analysis of tract segregation intrudes conscious administrative factors which we have no way of handling.

A second issue is that the typical size of Census tracts varies between cities. As has been shown empirically,[2] the smaller the area units the higher the indexes of segregation are likely to be. Therefore, two cities would probably show differences in residential segregation even <u>if</u> they were similar in every other respect, provided that they were divided into different numbers of Census tracts. To determine the extent to which our indexes were influenced by this element, the average population size of Census tracts in our 35 cities were correlated with the D's. The correlations were insignificant, and this element also proved insignificant in later step-wise regression analysis.

A third problem arising from the use of tract data stems from the fact that many of the cities

in the Southwest have a relatively small number of tracts. There existed the possibility of confounding the D by the number of tracts. This problem can be illuminated with a hypothetical illustration: Assume that all tracts in all cities have exactly 5,000 persons. A city of 5,000 persons would thus have only one tract; one with 10,000 would have two tracts, and so on. The indexes of segregation are likely to increase with city size up to a certain point, beyond which the addition of another area unit will have little or no impact on the final result. Our finding that greater segregation is associated with larger population size may be slightly influenced by this element as well as by "real" differences.

The analysis of 35 tracted cities is cross-sectional and limited to 1960. The sharp changes in many city and tract boundaries between 1950 and 1960 preclude the preparation of indexes which could be compared for both benchmark years — a procedure feasible only where block data are available. (Analysis prior to 1950 is even less feasible due to changing Census definitions of Mexican-Americans.) Further, a large number of these cities were not tracted until 1960.

There is another technical matter with respect to the preparation of the indexes of segregation: indexes were calculated both for central cities and for SMSA's. In some cases the differences between the two indexes were substantial. However, the SMSA indexes were not always higher, as one might expect if the minority population were uniformly concentrated in older central sections of the urban areas.[3] The reason is that in certain SMSA's of the Southwest as, for example, in San Bernardino, the central cities are surrounded by extensive rural territory, where large numbers of Mexican-Americans (and smaller numbers of Negroes) are concentrated in small enclaves and shacktowns close to agricultural employment opportunities. In other cases, such as Los Angeles, the SMSA reflects the limits of urbanized areas more accurately than the central city. Lacking strong indications to the contrary in our data, we confined our analysis to the central cities, thus avoiding the introduction of agricultural elements. The correlations between the metropolitan and city indexes were high enough to consider them as substitutes for one another.

The cities included in the study are all central cities in Standard Metropolitan Statistical Areas in 1960. However, a number of central cities in the five southwestern states were excluded for several reasons No Census tract data were available for a few areas and relevant indexes of dissimilarity could not be calculated. Also, central cities with less than 2,000 Spanish-surname persons or with less than 2.5 percent of the population having Spanish-surname persons were not included. As a result, the central cities of Long Beach, California and Amarillo, Beaumont, Texas City, Midland, Texarkana and Tyler (all in Texas) did not enter into the analysis.

Notes to Appendix B

1. As presented in Taeuber and Taeuber, op. cit., pp. 39-41. Fifteen of the cities analyzed by the Taeubers using block data there in the Southwest.

2. Ibid., p. 230.

3. The correlation coefficients between city and SMSA indexes were as follows: WPSS vs. Anglo = .92; WPSS vs. Negro = .85; Negro vs. Anglo = .78.

APPENDIX C

Procedures and Findings of Exploratory Analysis

This discussion supplements and systematizes the more limited text discussion of the exploratory phase of our research. We present first a description of all of the independent variables used in this analysis, second a description of the procedure used, and finally a brief presentation of the findings. All of the data were drawn from the 1950 and 1960 Censuses of Population and Housing. Unless otherwise stated the variables defined below refer to 1960.

Variables

Cultural factors: (a) taste for discrimination. — Two indicators of the community's taste for discrimination were used. The first was the extent to which each minority's income departed from the estimate of that income based on the group's educational attainment.

Variable 1. Residuals of WPSS family income as estimated from a simple correlation with educational attainment of persons 25 years old and over. (+2,000)

$\bar{x}$ = \$2000 S = \$486

Variable 2. Residuals of nonwhite family income as estimated from a simple correlation with educational attainment of persons 25 years old and over. (+2,000)

$\bar{x}$ = \$1100 S = \$604

The second was an indicator of what we presumed to be a Southern, and generally discriminatory local ethos. It was simply a dummy variable, indicating whether each city was in Texas or not.

Variable 3. Texas or not Texas (dummy variable)

Cultural factors: (b) taste for segregation. — As indicated in the text, a large number of alternative proxies for this factor were explored. The first represented an attempt to express empirically the lack of acculturation of the Mexican-American population, and their presumed propensity for voluntary segregation.

Variable 4. Percent of all WPSS who were foreign-born

$\bar{x}$ = 13.9% S = 7.0%.

Nine other variables were explored in an attempt to find an unconfounded expression of traditional familism. As indicated in the text, the variable we ultimately used was intercorrelated with income factors. We attempted to extricate the factor from the economic overtones by exploring such matters as fertility and female participation in the labor force in addition to an over-crowding variable.

Variable 5. Percent of WPSS occupied housing units with 5 or more persons

$\bar{x}$ = 41.1% S = 7.3%

Variable 6. Percent of nonwhite occupied housing units with 5 or more persons

$\bar{x}$ = 26.7% S = 4.5%

Variable 7. Percent of WPSS females 14 years old and over in the labor force

$\bar{x}$ = 30.6% S = 5.4%

Variable 8. Percent of nonwhite females 14 years old and over in the labor force

$\bar{x}$ = 47.2% S = 8.3%

Variable 9. Percent of WPSS occupied housing units with more than 1.0 persons per room

$\bar{x}$ = 36.3% S = 12.4%

Variable 10. Percent of nonwhite occupied housing units with more than 1.0 persons per person

$\bar{x}$ = 23.1% S = 6.6%

Variable 11. Crude fertility ratio WPSS/Anglo

$\bar{x}$ = 1.6 S = 0.27

Variable 12. Crude fertility ratio Nonwhite/Anglo

$\bar{x}$ = 1.4 S = 0.24

Variable 13. Crude fertility ratio WPSS/Nonwhite

$\bar{x}$ = 1.1 S = 0.22

Economic factors: (a) competitive position of the minority. — A number of alternative expressions of this factor were also explored. We examined the absolute position of each minority by looking at its median income, and also its relative economic position by looking at the ratio or percentage of its median income to that of some other subpopulation. We also explored this on an income per capita basis, as well.

Variable 14. *WPSS median family income

$\bar{x}$ = $1455 S = $930

Variable 15. Nonwhite median family income

$\bar{x}$ = $3868 S = $858

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*This variable was introduced as 1/median family income + 5,921. This resulted from a mistaken notion at the initiation of the study that the computer program would only interpret positive correlations. On an a priori basis we assumed that in cities with relatively high median family income segregation would be low. This assumption proved correct, but the inversion was unnecessary. No particular meaning should be attached, however, to the mean.

Variable 16. Ratio of total median family income to WPSS median family income

$\bar{x}$ = 1.33 S = 0.17

Variable 17. Ratio of total median family income to nonwhite median family income

$\bar{x}$ = 1.57 S = 0.22

Variable 18. Nonwhite median family income as a percent of WPSS median family income

$\bar{x}$ = 86.1% S = 11.5%

Variable 19. Ratio of total to WPSS income per person in family

$\bar{x}$ = 1.7 S = .3

We were also concerned with income differentiation, that is, the extent to which each minority's income was clustered around its mean or was spread over a relatively wide range.

Variable 20. Percent WPSS within ± $1,000 of their median income

$\bar{x}$ = 46.8% S = 7.7%

Variable 21. Percent nonwhite within ± $1,000 of their median income

$\bar{x}$ = 47.9% S = 8.0%

Economic factors: (b) condition of the housing market. — Variables number 9 and 10 above, the "over-crowding variables", may be considered as expressions of the pressures of limited income on the demand for housing by each population. We were also concerned with the effect of supply of housing on segregation, as discussed at length in the text. To measure this we used the occupancy rate — the inverse of the vacancy rate — for rental property.

Variable 22. Occupancy rate for rental property (inverse of vacancy rate)

$\bar{x}$ = 89.5% S = 3.0%

Demographic and ecological factors: (a) size and density of the total population. — These variables were quite straightforward.

Variable 23. Total population

$\bar{x}$ = 301,950 S = 442,302

Variable 24. Density of total population: persons per square mile

$\bar{x}$ = 3,805 S = 2,643

(A technical variable related to city size — population per tract — was also explored. $\bar{x}$ = 4,351, S = 1,319.)

We were also concerned with the effects of change in the size of the total population.

Variable 25. *Percent increase of total population in the county, 1950-1960 [plus 4.5]

$\bar{x}$ = 56% S = 32%

Demographic and ecological factors: (b) characteristics of the minorities. — Under this rubric we were concerned with several issues. Generally, we looked at three subpopulations — Mexican-American, Negro and nonwhite. The first set of issues was how best to express each of the minorities. We examined the absolute numbers of each minority.

Variable 26. Number of WPSS

$\bar{x}$ = 37,966 S = 58,936

Variable 27. Number of Negroes

$\bar{x}$ = 34,794 S = 67,579

Variable 28. Number of nonwhite

$\bar{x}$ = 41,118 S = 80,400

Next we examined the proportion of each in the total population.

Variable 29. WPSS as percent of total population

$\bar{x}$ = 14.5% S = 15.4%

Variable 30. Negroes as percent of total population

$\bar{x}$ = 9.2% S = 7.6%

Variable 31. Nonwhites as percent of total population

$\bar{x}$ = 10.6% S = 8.0%

Next we turned to the composition of the "minority" population, that is the nonwhite and Spanish-surname minorities plus non-Mexican immigrants and their children. We were concerned with finding a meaningful way of expressing the relative preponderance of Mexican-Americans, Negroes and other nonwhites in a locale.

Variable 32. Ratio of WPSS to nonwhite

$\bar{x}$ = 8.7 S = 37.7

Variable 33. WPSS as percent of total minority (defined above)

$\bar{x}$ = 36.3% S = 22.1%

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*In order to hold the geographic area constant, population changes in the counties rather than cities were examined. The amount and variation in annexations of central cities together with the impossibility of reconstructing the number of people in ethnic groups located in 1950 in areas as defined in 1960 necessitated this approach.

Variable 34. Negroes as percent of total minority

$\bar{x}$ = 27.4% S = 21.3%

Variable 35. Nonwhites as percent of total minority

$\bar{x}$ = 30.5% S = 20.5%

We explored two versions of variables expressing change in the minority populations.

Variable 36. *Percent increase of WPSS in the county, 1950-1960

$\bar{x}$ = 87.5% S = 55.4%

Variable 37. *Percent increase of Negroes in the county, 1950-1960

$\bar{x}$ = 87.4% S = 65.1%

Variable 38. *Percent increase of nonwhites in the county, 1950-1960

$\bar{x}$ = 116.5% S = 91.4%

Variable 39. *(WPSS as percent of 1960 total) minus (WPSS as percent of 1950 total) plus 100

$\bar{x}$ = 101.6 S = 2.7

Variable 40. (Negroes as percent of 1960 total) minus (Negroes as percent of 1950 total) plus 100

$\bar{x}$ = 101.8 S = 3.0

Variable 41. (Nonwhites as percent of 1960 total) minus (nonwhites as percent of 1950 total) plus 100

$\bar{x}$ = 102.6 S = 3.7

Finally, we turned our attention to the distribution of each minority within the metropolitan area, which we had believed (see Chapter II) might be of significance in the analysis of their segregation.

Variable 42. Percent of WPSS in central city of SMSA

$\bar{x}$ = 58.3% S = 27.9%

Variable 43. Percent of Negroes in central city of SMSA

$\bar{x}$ = 71.0% S = 20.8%

Variable 44. Percent of nonwhites in central city of SMSA

$\bar{x}$ = 67.7% S = 23.0%

Procedure for Analysis

In keeping with the goals of this phase of analysis, we chose a technique that would permit exploration of the significance of the different kinds of variables and also permit evaluation of the

*See footnote for Variable 25.

alternative expressions of the variables. As a general model, our analysis took the following form:

$$I_{ij} = f(Y_{mj}, P_{mj}, S_{ij}, A_j, M_j, N_{ij})$$

where:

I_{ij} = The residential segregation between two subpopulations (i) in the j-th community

Y_{mj} = The taste for discrimination of any subpopulation in relation to another subpopulation (m) in the j-th community

P_{mj} = The taste for segregation of any subpopulation in relation to another subpopulation (m) in the j-th community

S_{ij} = The relative economic strength between two subpopulations (i) to purchase urban space in the j-th community

A_j = The potentially available supply of housing for occupancy in the j-th community

M_j = The demography of the j-th community

N_{ij} = The demographic characteristics of any subpopulation in relation to another subpopulation in the j-th community

The method used for testing the model was multiple regression analysis. This technique is utilized widely today to determine the relationship between a series of "independent" and "dependent" variables.[1] The "dependent" variables in our study are the dissimilarity indexes in the thirty-five cities. Variations in these are "explained" by the "independent" variables. The analytical task is to measure the extent to which the "independent" variables separately and together are associated with the "dependent" variables.

For the present purpose we have chosen a particular type of multiple regression analysis known as "stepwise regression." As its name implies, stepwise regression analysis proceeds one step at a time. In the first step the independent variable is selected which has the highest correlation coefficient with the dependent variable, that is, the index of residential dissimilarity. In every subsequent step each of the remaining variables not already in the equation is "temporarily" added one at a time. The F - value of each variable is calculated as if it were to remain in the equation. After making these calculations for every variable not yet in the equation that variable is added with the highest F - value. At the same time new regression coefficients, coefficients of determination, and F-values are calculated for all of the variables now in the equations. If the F-value of any variable now in the equation falls below a specified minimum this variable is then removed, and one proceeds to the next step.

The stepwise regression, therefore, is a method where variables are added or removed from the equations, depending upon the F - values as a result of changing the equation from step to step. Computations continue to be made and variables not in the equation are added as long as

the F - values are above the specified minimum.[2]

The methodology permits the selection of "best" equations. These "best" equations are shown in Table C-1.

Findings

The stepwise regression analysis was performed for each of the three types of residential segregation. The results of these analyses are presented in statistical form in Table C-1, which shows the "best" equations selected for each dependent variable. These equations "explain" from 49 to 69 percent of the variance in the Ds.

As indicated in Table C-1, relatively few independent variables accounted for most of the ascertained variance. (The addition of more variables to those represented in the chart did not appreciably raise the R^2s and were added at the expense of a loss in significance for its individual regression coefficients.) Furthermore, these variables tended to be similar from one equation to the next. They are presented in Table C-1 roughly classified into five categories.

One "cultural" category included two versions of the same variable (Variables 5 and 6) expressing household size, conceptualized as an indicator of traditional familism. As indicated in the text, this factor was highly intercorrelated with economic factors, but attempts to find an "uncontaminated" variable that would express the cultural factor were unsuccessful. Table C-2 shows intercorrelations of all variables appearing in these equations.

In all three equations an income variable was significant. In minority versus dominant segregation the relevant factor was the ratio or percentage of the total population vs. income to that of each minority. The regression coefficients in both cases are positive, reflecting the relative economic position of the minority.[3] As for interminority segregation, the greater the proportion of Mexican-Americans whose incomes clustered around their own median, the more likely they were to be segregated from Negroes. This finding is discussed in Chapter IV.

In the demographic category, the variable "size of city" contributed significantly to the "explanation" of variance in all three types of segregation. This variable was highly intercorrelated with the number of persons of Spanish surname (see Table C-2 for correlations between Variables 26 and 23.)

A second set of demographic variables related to the composition of the minority (Variables 32, 33, and 34). In general, the larger the proportion of nonwhites in the total minority popula-

TABLE C-1

Coefficients of Determination, Partial Correlations, Regression Coefficients, T-values, and Intercept Values for Variables Appearing in "Best" Equations

Independent Variables	Dependent Variables: Spanish surname vs. Anglo			Spanish surname vs. Negro			Negro vs. Anglo		
	b	T-value	Partial Correlation[a]	b	T-value	Partial Correlation[a]	b	T-value	Partial Correlation[a]
Cultural									
X_5 Percent WPSS O.H.U. with 5 persons or more	.79	2.80***	.46	—	—	—	—	—	—
X_6 Percent nonwhite O.H.U. with 5 persons or more . .	—	—	—	—	—	—	.61	2.16**	.37
Economic									
X_{16} Ratio of total median to WPSS median income[b] .	25.90	2.11**	.37	—	—	—	—	—	—
X_{20} Income differentiation among WPSS[c]	—	—	—	.58	2.15**	.37	—	—	—
X_{17} Ratio of total median to nonwhite median income[d]	—	—	—	—	—	—	21.21	3.70***	.56
Demographic									
X_{23} Total city population	.00001	2.41**	.41	—	—	—	—	—	—
X_{26} Number of WPSS	—	—	—	.00014	3.96***	.59	.00005	2.46**	.41
X_{32} Ratio of WPSS to nonwhites	-.09	-2.58**	-.43	—	—	—	-.10	-2.97***	-.48
X_{34} Negroes as percent of minority	—	—	—	.34	3.24***	.52	—	—	—
X_{29} WPSS as percent of total .	—	—	—	-.27	-1.59	-.28	—	—	—

TABLE C-1 (Continued)

Coefficients of Determination, Partial Correlations, Regression Coefficients, T-values, and Intercept Values for Variables Appearing in "Best" Equations

Independent Variables	Dependent Variables								
	Spanish surname vs. Anglo			Spanish surname vs. Negro			Negro vs. Anglo		
	b	T-value	Partial Correlation[a]	b	T-value	Partial Correlation[a]	b	T-value	Partial Correlation[a]
X_{39} Relative increase WPSS[e]	-.71	-1.25	-.23	—	—	—	—	—	—
X_{36} Percent increase WPSS (county)[f]	—	—	—	-.08	-2.07**	-.36	—	—	—
Intercept		58.91			26.43			29.23	
Multiple R^2		.69			.54			.49	

[a]Beta coefficients were also calculated for each independent variable. With one minor exception, for the WPSS/Anglo dissimilarity index, ranking of the variables according to magnitudes of their beta and partial coefficients was the same.

[b]X_{16} = Total population median family income divided by WPSS median family income.

[c]X_{20} = Percent WPSS within plus or minus $1000 of WPSS median income category.

[d]X_{17} = Total population median family income divided by nonwhite median family income.

[e]X_{39} = (WPSS as percent of total 1960) less (WPSS as percent of total 1950) plus 100.

[f]X_{36} = Percent increase in WPSS, 1950-1960, in county.

*** Significant at 0.01 level
** Significant at 0.05 level
* Significant at 0.10 level

TABLE C-2

Intercorrelations of Independent Variables

	X_5	X_6	X_{16}	X_{17}	X_{20}	X_{23}	X_{26}	X_{29}	X_{32}	X_{34}	X_{36}	X_{39}
X_5	1.0	.26	.70	.52	.71	-0.30	-0.07	.27	.17	.18	.59	-0.11
X_6		1.0	.15	.84	.06	-.17	-.20	-.07	.01	-.02	.13	-.10
X_{16}			1.0	.45	.69	-.15	-.07	-.03	-.13	.04	.35	.34
X_{17}				1.0	.40	-.19	-.25	-.13	-.02	.61	.05	.04
X_{20}					1.0	-.26	-.10	.20	-.19	.08	.11	-.02
X_{23}						1.0	.76	-.09	-.11	.07	.05	.06
X_{26}							1.0	.38	.06	-.22	-.16	-.08
X_{29}								1.0	.81	.49	-.42	-.39
X_{32}									1.0	.27	-.27	-.36
X_{34}										1.0	.26	.21
X_{36}											1.0	.42
X_{39}												1.0

tion of a city, the greater the segregation of each minority — both from the Anglo population and from the other minority. Conversely the greater the proportion of Spanish-surnamed people, the lower the segregation of each minority from the Anglos and from the other minority.

A final set of demographic variables appeared in the two equations concerning Mexican-Americans. In the equation concerning segregation of Mexican-Americans from Anglos, the relevant variable was the relative increase of Spanish-surnamed persons, but it was not statistically significant even at the 0.10 level. In the equation concerning segregation of Mexican-Americans from Negroes a version of the same variable — increase in Mexican-Americans — did attain statistical significance. In other words, the greater the increase of the Mexican-Americans the lower was the segregation of Mexican-Americans from both Anglos and Negroes. This is also discussed in the Text Chapter IV.

Notes to Appendix C

1. For discussion see F. E. Croxton and D. J. Cowden, Applied General Statistics (Englewood Cliffs, N. J.: Prentice-Hall, 1955), Mordecai Ezekiel and Karl A. Fox, Methods of Correlation and Regression Analysis (New York: John Wiley and Sons, 1959, 3rd Ed.), and W. J. Dixon, ed., BMD, Biomedical Computer Programs (Los Angeles: UCLA Health Sciences Computing Facilities, 1964).

2. Ibid.

3. It will be noted that the income ratios do not directly measure the relationship between WPSS and Anglos or Negroes and Anglos. For Anglo income we had to substitute income of all families. In most cities where the minorities are a small proportion of the total this is not too important. However, in some cities — e.g. Laredo — where the minorities are a large percentage of the total population, the ratio utilized will not truly measure the differentials between the income of minorities and Anglos. The influence of our procedure on the results could not be established.